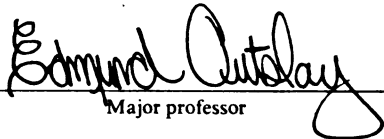This is to certify that the

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PRIVATE NONOPERATING FOUNDATIONS:
AN EMPIRICAL INVESTIGATION OF
PAYOUT RATES AND FOUNDATION CHARACTERISTICS
BEFORE AND AFTER THE ECONOMIC RECOVERY TAX ACT OF 1981

presented by

Susan Convery Kattelus

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By

Susan Convery Kattelus

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ABSTRACT

PRIVATE NONOPERATING FOUNDATIONS:
AN EMPIRICAL INVESTIGATION OF
PAYOUT RATES AND FOUNDATION CHARACTERISTICS
BEFORE AND AFTER THE ECONOMIC RECOVERY TAX ACT OF 1981

By

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This study's purpose is to document empirically descriptive characteristics of private nonoperating foundations (e.g., funding-type, size, and age) that relate to decision variables (e.g., payout rates, rates of return, and net worth). The study also examines four models of the payout decision process under two different tax regimes: the restrictive era before 1982 in which strict minimum distribution rules applied and the period after Congress relaxed the payout rules in the Economic Recovery Tax Act (ERTA) of 1981. Hypotheses include a significant association of descriptive and decision variables; lower payout rates, higher rates of return, and higher net worth in the post-ERTA tax regime; and significant explanatory power of the payout models.

A panel data base is formed from the annual tax returns [Form 990-PF] for 208 Michigan independent private nonoperating foundations for a twelve year period (1976 to 1987). Univariate statistics and correlations of the variables across two tax regimes are examined. The sensitivity of results to several measures of the variables is tested. Three models of foundation payouts suggested by the literature and a proposed model, which takes advantage of the richness of the panel data, are empirically tested

using regression analysis for the 103 endowment-type foundations.

Results confirm that funding-type, size, and age are variables which can distinguish foundations. Classifying foundations into endowment and flow-through foundations is critical. Payouts are not random. Patterns are found across foundations and over time. Mean payout rates for most classifications are not significantly different between the two tax regimes, although average rates of return and net worth are higher in the post-ERTA years. The models all explain a significant portion of the variance in payouts across foundations regardless of the way the sample is stratified. Adjusted net income, minimum investment return, previous year's payouts, fair market value of assets (size), and rate of return significantly contribute to the explanation of payout variability. Age, net worth, and tax regime do not. The foundation-specific identifier is significant suggesting that there are other characteristics that explain the variation in payout rates. Congress' efforts to reverse the detrimental effects of the original minimum distribution rules appear to have been successful. However, effective monitoring of foundation payouts requires that foundations be distinguished by their funding-type.

This dissertation is dedicated to

my husband, John

my three sons, John, Joe, and Dan

my parents,

my large family, and good friends.

I couldn't have done this without

their love and support and God's blessings.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

TABLE OF FIGURES

Chapter One

INTRODUCTION AND OVERVIEW

Private foundations are enigmas; praised by some and disparaged by others. Two opposing viewpoints capture this philosophical controversy. Several national commissions[1], as well as testimony of public charities before Congress[2], support the viewpoint that foundations are an effective example of pluralism and democracy at work and should be encouraged to exist. Critics, on the other hand, charge that private foundations are effectively autonomous, undying, and tax-exempt, and that this is incongruent with an American democracy [Nielsen, 1972, p. 1][3].

Congress has been responsive to both views. The Internal Revenue Code (IRC) provides numerous incentives to foundations to carry on philanthropic activities, underlying Congress' belief that the public good is most efficiently served by tax expenditures[4] rather than direct government expenditures. Congress also limits the benefits available from such incentives with regulatory excise taxes as a means of safeguarding potential abuses by the wealthy to further their own interests.

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[1]For example, Walsh Commission [1915]; Reece Committee [1954]; Patman Committee [1962]; Filer Commission [1965]; U.S. Treasury Report to Congress [1965]; Mills Committee [1969]; Peterson Commission [1970]; Filer Commission [1975].

[2]Representatives of the Girl Scouts of the USA, United Negro College Fund, United Way of America, and National Conference of Catholic Charities were among those public charities that spoke before the Senate Finance Subcommittee on Taxation and Debt Management on March 30, 1981.

[3]Congressman Wright Patman included a recommendation to limit the life of a foundation to 25 years in the Patman Committee Report in 1965.

[4]Tax expenditures are subsidies built into the tax code. These subsidies can take the form of deductions, exemptions, or exclusions in the calculation of taxable income.

1

At issue is whether foundations offer any incremental benefit over public charities in providing for the public welfare. Foundations point to scientific breakthroughs resulting from research funded by them.[5] Critics counter that there is no empirical evidence to indicate that charitable giving is higher or that public needs are better satisfied when the government chooses tax expenditures over direct expenditures. Consequently, neither the role of this unique institution nor the effect of tax regulation over foundation manager behavior is well understood.

One of the issues that has concerned Congress is how and whether to regulate the foundations' distributions (payouts) to other operating charities. By mandating minimum payout requirements[6], Congress can restrict the use of foundations as private tax shelters and insure that funds will be used for their intended purpose. If the mandated payments are too large, however, they can erode the foundation's asset base, resulting in liquidation of the entity. This distribution versus erosion dilemma warrants investigation for at least three reasons.

First, the foundation sector is large and influential. Over 31,000 U.S. foundations pay out more than $6 billion a year and hold more than $100 billion in assets [Riley, SOI Bulletin, 1989]. More than $75 billion of these assets are investments in securities [Riley, 1989, p. 30],

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[5]For example, the Mott Foundation reports [1981, p. 1] that foundations made the "green revolution" possible; that is, the development of new seed varieties in cereal crops which put off the thrust of famine worldwide. In addition, Mott points out that foundations funded an effective yellow fever and polio vaccine.

[6]The terms payouts, distributions, qualifying distributions, and grants are used synonymously throughout this paper, although qualifying distributions, by definition, will be larger than any of the other terms (see footnote 11, Chapter 2).

illustrating the foundation sector's significant role as an institutional investor.

Second, Congress spends a substantial amount of resources regulating foundations. Few areas of tax policy have aroused more heated debate than incentives for and regulation of private foundations [Clotfelter, 1985a, p. 260]. The Tax Reform Act (TRA) of 1969 devoted an unprecedented one-third of its law changes to regulatory provisions, including establishment of minimum distribution requirements. The changes combat real and perceived abuses of the foundation entity. The Economic Recovery Tax Act (ERTA) of 1981 followed by relaxing the minimum distribution rules.

Third, there is a limited amount of data and empirical studies on foundations [Clotfelter, 1985a, p. 272]. Although by law annual foundation financial information has been available to the public since 1943, data have not been easy to access. Few cross-sectional empirical studies of foundation payouts (e.g., Labovitz [1974]; Cushman [1979]) or longitudinal studies[7] (e.g., Salamon and Voytek [1989]) appear in either the economic or accounting literature. With the exception of the Salamon and Voytek study, these studies examined the effects of the TRA of 1969 on foundation payouts and not the ERTA of 1981. Therefore, the belief that empirical research using publicly available data can assist in determining the effectiveness of recent tax legislation on the large and influential foundation sector motivates this study.

This study's purpose is to document empirically payout rates (the

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[7]An unpublished study by Shepard [1981] supported by the Twentieth Century Fund is reported by Ylvisaker [1987] as one of the only studies of foundation payout behavior over time.

amount paid out in grants as a percentage of the amount available for distribution), as well as rates of return, net worth, and related foundation-specific characteristics (e.g., funding-mechanism, size and age) across foundations and over time. After documenting discernible trends in payout performance before and after the ERTA of 1981, models of the payout decision process are examined in order to determine which foundations make similar economic decisions under different tax regimes. This study tests models of foundation payout behavior introduced in the literature, as well as a simple time series model, for the first time. In addition, a proposed model is examined as an initial attempt in understanding the behavior of foundation managers in response to differing tax regimes. The models' sensitivity to various measures of the variables is examined.

The focus of the current study is on Congress' primary regulatory tool from the 1969 legislation, the required minimum distribution, for independent private nonoperating foundations. A twelve year period surrounding the ERTA of 1981 is chosen for investigation. This period includes six years in the restrictive era after 1969 in which foundations were required to pay out the higher of all of their adjusted net income or five percent of their net investment assets (1976 to 1981). The six years after 1981 represent a tax regime in which Congress relaxed the minimum distribution rules and dropped the "all of the adjusted net income" requirement of the payout test (1982 to 1987).

The study employs a unique panel data base that pools time-series and cross-section data from foundation annual tax returns [Form 990-PF] for 213 Michigan private nonoperating foundations. Social science

disciplines such as public policy, economics, sociology, anthropology, law, and political science have just recently begun to investigate the theoretical elements of the role and behavior of the nonprofit sector. This study contributes to this emerging theoretical framework by using tax accounting panel data to examine the private foundation as an economic intermediary in the nonprofit sector regulated by the tax code.

Results confirm that funding-type, size, and age are variables which can distinguish foundations. Classifying foundations into endowment and flow-through foundations is critical. Payouts are not random. Patterns are found across foundations and over time. Mean payout rates for most classifications are not significantly different between the two tax regimes, although average rates of return and net worth are higher in the post-ERTA years.

The models all explain a significant portion of the variance in payouts across foundations regardless of the way the sample is stratified. Adjusted net income, minimum investment return, previous year's payouts, fair market value of assets (size), and rate of return significantly contribute to the explanation of payout variability. Age, net worth, and tax regime do not. The foundation-specific identifier is significant suggesting that there are other characteristics that explain the variation in payout rates.

Congress' efforts to reverse the detrimental effects of the original minimum distribution rules appear to have been successful. However, effective monitoring of foundation payouts requires that foundations be distinguished by their funding-type. These results suggest that further research be conducted that incorporates explicit measures of a

foundation's growth policy, alternative measures of payout rates, a national sample of foundations, and identification of other foundation specific variables that influence payouts.

The rest of this study is organized as follows: independent private nonoperating foundations as a component of the nonprofit sector along with the relevant tax legislation are discussed in chapter two; a summary of the theoretical framework and a review of previous research is provided in chapter three; a proposed model of foundation payouts and related hypotheses are developed in chapter four; the research design, sample selection, and statistical issues are described in chapter five; the analysis of the results appears in chapter six; and the study's contributions and implications are summarized in chapter seven.

Chapter Two

INSTITUTIONAL BACKGROUND

This chapter presents the institutional details that relate to the private nonoperating foundation and its place in the nonprofit "Third Sector." In addition, discussion of tax legislation affecting these entities frames the environment within which the foundation payout decision is studied. The chapter first explains the particular form of private foundation under investigation in this study along with a schematic of the entire Third Sector. The history of statutory provisions governing private foundations and the legislative intent behind restrictive provisions in the TRA of 1969 and the relaxation of the "payout provision" in the ERTA of 1981 are then discussed.

2.1   Private Foundations in the Nonprofit Sector

2.1.1   An Independent Private Nonoperating Foundation

Researchers often categorize nonprofit organizations under the label "Third Sector" to distinguish their unique role from the other two sectors in the American economy: government and business. Observers, then, differentiate the Third Sector by purpose (religious, social benefit or charitable, and members' interests) or by type of entity (public charity or private foundation[1]). The industry, in turn, classifies private

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[1]The general definition of a foundation is a nongovernmental, nonprofit organization with funds and programs managed by its own trustees or directors, established to aid social, educational, charitable, religious, or other activities serving the common welfare [The Michigan Foundation Directory, 1988, p. 195]

foundations as either community[2], operating[3], independent nonoperating, or corporate (company-sponsored). Figure 1 provides a schematic of the Third Sector.

---

[2]Community foundations, growing in popularity in recent years, are most often publicly supported organizations that make grants for social, educational, religious, or other charitable purposes in a specific community or region.

[3]Operating foundations are now defined as organizations that expend substantially all of their adjusted net income or minimum five percent investment return (whichever is lower) directly for the active conduct of their exempt activities and meet one of the three qualifying tests of assets, support, or operating expenditures [Riley, 1989, p. 36].

SCHEMATIC OF

THE NONPROFIT THIRD SECTOR

PURPOSE:

| Religious §501(d) | Social Benefit/Charitable §501(c)(3) | Mutual Nonprofit §501(c)(4)..(23) |

e.g., Social Clubs
Labor Unions
Trade Association

TYPE:

Public Charities
[Broad Public Support]

e.g. Schools
Medical Institutions
Public Safety

Community Foundations

Private Foundations
[Few Donors] §509(a)
31,221*

Operating Foundations
2,572*

Nonoperating Foundations
28,649*

Independent Foundations

Corporate Foundations

E.g., General Purpose Fdn.
Special Purpose Fdn.
Family Foundations

SUBJECT TO THE MINIMUM PAYOUT REQUIREMENT

* number of entities [figures are for 1985 (SOI Bulletin, Summer 1989)]

Figure 1

Charitable tax-exempt entities must first be organized as nonprofit corporations, associations, or charitable trusts[4] within a state to ensure that the entity is separate and autonomous from its founder. These nonprofit entities may then choose to apply to the Internal Revenue Service (IRS[5]) for "exemption from income tax" status under Internal Revenue Code Section(§) 501(c)(3) if they intend to serve charitable, educational, or scientific purposes. The advantage of this IRS classification is (1) exemption of the entity from income tax; (2) deductibility of the donor's contribution as a charitable deduction from income; (3) sales and property tax exemption by states; and (4) reduced postage rates.

Congress considers public charities, including community and operating foundations, adequately scrutinized by the public since they receive broad public support and are not as likely to provide incorporators with unfair tax advantages. Consequently, fewer tax law provisions constrain these entities. However, if organizations fail to maintain their status as public charities or operating foundations, the IRS reclassifies them as private nonoperating foundations.

The Internal Revenue Code negatively defines private nonoperating foundations[6] as all those §501(c)3 organizations that do _not_ meet the

---

[4]Charitable trusts can be established either during the lifetime of the donor (_inter vivos_) or upon the donor's death through the terms of a will (testamentary).

[5]For simplicity throughout the paper, some common abbreviations are shown without punctuation; such as IRS, IRC, SOI, ERTA, and TRA.

[6]Private nonoperating foundations are technically all IRC §501(c)(3) organizations except those that receive at least one-third of their support from the general public; receive more than one-third of their support from contributions, membership fees, and providing charitable

definitions of either operating foundations or public charities [IRC §509(a)]. Nonoperating foundations are intermediaries or conduits that accept charitable contributions from individuals, corporations, and estates and, in turn, make grants to public charities and directly to needy individuals if the foundation agrees to exercise expenditure responsibility.[7]

This study focuses on independent nonoperating foundations established by individuals rather than corporate, operating, or community foundations. Nonoperating foundations are quite different from operating foundations and community foundations with respect to the level of regulation they are subject to under tax law provisions. Although both corporate and independent foundations are subject to the same tax regulation, presumably they differ in the policies and philosophies that guide their investment and distribution decisions. Therefore, this study does not investigate corporate foundations.

2.1.2   The Controversy

The private foundation appears to be a creature of the tax code. That is, the Code defines the entity, exempts it from income taxes, and regulates it through different excise taxes on prohibited behavior. However, some of the largest foundations were established before the

_____

services; are operated exclusively for the benefit of an excluded organization; test for public safety; are affiliated with broadly supported social welfare groups; or are labor unions, trade associations, and business leagues [IRC §509(a)]. This classification includes both independent and company sponsored private nonoperating foundations.

[7]Exercising "expenditure responsibility" means that the foundation is responsible to exert all reasonable efforts to ensure that a grant given is spent solely for the purpose for which it was made, to obtain complete reports from the grantee on how the funds were spent, and to make full reports with respect to such expenditures to the IRS.

income tax laws existed, and there is evidence that people establish foundations for nontax reasons. These reasons include altruistic concern for the welfare of others, personal philosophies and beliefs, memorials to family and heirs, commitment to a specific geographical community, and even social pressures from peers [Boris, 1987, p. 80]. The public policy controversy over whether public resources are best used in encouraging and regulating this intermediary continues.

Clotfelter [1985a, p. 253] notes that virtually no econometric analysis of the tax effects on foundations exists that can compare with other areas of charitable behavior. Empirical research, such as the present study, provides hard data to fill this void and, hopefully, contributes to the debate over the role and behavior of private foundations.

2.2 Legislative Intent and Overview of the IRC Provisions

2.2.1 Tax Regulation before 1969

Philanthropic organizations enjoyed tax exempt status from the first revenue act in 1894. Soon after this act, the Code allowed donors to deduct charitable contributions from income [Lashbrooke, 1985, p. 3]. The Carnegie and Rockefeller Foundations are among the largest and oldest, established in the early 1900s, and benefitted from this favorable tax environment.

However, more wealthy philanthropists established foundations after 1940 primarily motivated by the increase in the highest individual marginal rate, which reached ninety percent at one point [Boris, 1987, p. 80]. Increases in the top marginal tax rate lowered the cost of

charitable giving.[8] This incentive, coupled with favorable changes in the estate and gift tax laws with respect to charitable gifts, provided incentives for donors to contribute to charity and establish private foundations.

A skeptical Congress saw the potential for wealthy individuals to use the foundation entity as a tax shelter for personal gain and began its first attempts to regulate foundations in the Tax Act of 1950. Table 2.1 provides a summary of the relevant tax legislation regulating foundations and affecting charitable donations by individuals.

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[8]The "cost of charitable giving" is often defined in econometric charitable giving studies as 1 minus the tax rate (t). That is, if charitable contributions reduce gross income, then taxes are reduced by the tax rate times the amount of the charitable donation. Therefore, the net cost of a $1 gift is $1 less the taxes that would have been paid on $1 of income ($1 * the tax rate [1-t]).

Table 2.1

LEGISLATIVE HISTORY

Tax Law Provisions Affecting Private Foundations

Tax Reform Act of 1950 [P.L. 81-814]

- foundations that accumulate income in unreasonable amounts or for unreasonable periods of time may lose their tax exempt status
- restrictions on transactions between donors and foundations
- tax on unrelated business income of tax-exempts organizations [UBIT]
- restrictions on various prohibited transactions

Revenue Act of 1964 [P.L. 88-272]

- limitation on charitable contributions to public charities raised to 30% from 20% of adjusted gross income (AGI); gifts to foundations are held at 20% of AGI

Tax Reform Act of 1969 [P.L. 91-172]

§170	retained the 20% percent of AGI deduction limitation for contributions to private nonoperating foundations while increasing the rate to 30 or 50 percent for other exempt organizations; gifts exceeding 20% limit are not eligible for carryover; gifts of appreciated assets to private foundations are reduced by the capital gains exclusions rate as applied to the appreciation (reduced valuation of certain property contributions from current value to tax basis)
§509	private foundations are negatively defined
§4940	4% excise tax on net investment income (audit tax) established
§4941	prohibition on self-dealing and transactions such as loans, employment, purchases or transfers of property with disqualified persons
§4942	excise tax on failure to distribute income; required minimum distribution (payout) of the higher of net income or 6% of net investment assets; the excise penalty is 15% of the undistributed amount rising to 100% of the amount not distributed within the correction period
§4943	tax on excess (more than 20% interest) business holdings to prevent using a foundation to maintain control of a business
§4944	tax on risky or speculative investments that jeopardize charitable purpose
§4945	tax on lobbying and other taxable expenditures for improper purposes §4946 definition of disqualified persons by reference to indirect stock ownership under §267(c); special rules
§4947	certain non-exempt trusts are treated as private foundations
§4948	tax on gross investment income of foreign operating

foundations; exemption of foreign organizations

Other: Two required annual reports to be made available to public
             with day to day monetary penalties for not doing so (Form 990-
             AR and 990-PF).

Tax Reform Act of 1976 [P.L. 94-455]

§4942   rate of minimum required distributions changed to a fixed five
             percent from 6.75%; rescinded the authority of Treasury to
             change rate; two-tier penalty if the foundation does not make
             its minimum distribution by the following year

Other: restrictions include: (i) permitting a private foundation to
             sell certain property to the "disqualified" person to whom it
             is leased, (ii) treating certain "set asides" as qualifying
             distributions, (iii) permitting sale of certain "non-excess"
             business holdings to a "disqualified" person, and (iv)
             excluding from distributable income imputed interest from pre-
             1970 sales

Revenue Act of 1978 [P.L. 95-600]

§4940   reduction in excise tax on investment income to 2% from 4%

Economic Recovery Tax Act of 1981 [P.L. 97-34]

§4942   requirement to pay out all the foundation's net income is
             eliminated; the minimum payout requirement is only five
             percent of net investment assets
§509   definition of private operating foundations is relaxed

Other: reduced the maximum individual tax rate to 50% from 70%
             increases in the estate unified credit, increase in the annual
             gift tax exclusion, and increase in the marital deduction in
             the estate and gift tax law
             reporting requirement changed to a revised Form 990-PF

Deficit Reduction Act of 1984 [P.L. 98-369]

§4940   reduction in excise tax on investment income (audit tax) to 1%
             from 2% if the foundation's payout for charitable purposes is
             increased by an equivalent amount making certain payouts based
             on an average five year base period
§4943   applies a five year divestiture period to change holding
             levels resulting from a disqualified person's acquisition of
             holdings

Other: permits deductibility of full value of some types of
             appreciated property (e.g., publicly traded stock)
             extends carryover of excess charitable contributions to
             private nonoperating foundations to five years

charitable deduction limitation is increased to 30% of
adjusted gross income (up from 20%) for private nonoperating
foundations for gifts of cash and ordinary income; 20% limit
remains for gifts of capital gain property

administrative expenses may not be more than 15% of
foundation's qualifying distributions

created a special class called "exempt operating foundations"
which are exempt from the 2% excise tax on net investment
income

No significant changes in the TRA of 1986; Technical Corrections Act of
1987; Omnibus Budget Reconciliation Act of 1989[9]

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[9]This list is taken, in part, from E. Beckwith and J. DeSirgh, "Technical
Appendix" America's Wealthy and the Future of Foundations, 1987, pp. 288-
293.

Congress enacted a "loss-of-tax-exempt-status" penalty for foundations that accumulated an "unreasonable" amount of income for an "unreasonable" length of time. However, the definition of unreasonable was subjective and the law provided no method to measure it. Until 1969, then, the only compliance sanction available to the IRS in supervising exempt organizations was the revocation of exempt status [Ginsberg, et. al., 1977, p. 2658].

2.2.2 Restrictive Tax Rules in the TRA of 1969

House and Committee Reports preceding the TRA of 1969 reiterated many real and perceived abuses publicized by the press in the late 1960s. Abuses identified in House Report 91-413 [1969] included donors receiving a charitable deduction long before the money benefitted charity, self-dealings such as loans and sales between the incorporating family and the foundation, speculative investments, lobbying to influence legislation, and transfer of closely held stock to foundations while donors maintained control of the business. Congress sought to curtail these abuses in the TRA of 1969 by enacting excise taxes [IRC Chapter 42] to ensure that private foundations lived up to the public good [Clotfelter, 1985a, p. 261].

Congress' primary regulatory tool in the 1969 legislation, the required minimum distribution, established a minimum payout in grants to other nonprofit organizations equal to the higher of either adjusted net income or the foundation's "minimum investment return" [IRC §4942]. Congress initially established the minimum investment return as a variable

six percent of foundation's net investment assets.[10]   The Treasury

adjusted this rate each year to a rate that bore the same relationship to

six percent that money rates and investment yields for the prior year bore

to money rates and investment yields for 1969. If the minimum qualifying

distributions[11] were not made in the taxable year or the following year,

the foundation was liable for a two-tier excise tax of 15 percent of the

income not distributed at the beginning of the second succeeding taxable

year, and an additional tax of 100 percent of the undistributed income if

still not distributed at the end of a correction period [IRC §4942]. This

penalty remains today.

2.2.3   Relaxation of the Payout Rules in the ERTA of 1981

Representatives of public charities that receive foundation grants

testified before the Senate Finance subcommittee in 1981 that the minimum

payout rule was eroding the real value of foundations' assets, thereby

causing irreparable harm and jeopardizing the existence of foundations by

causing them to invade their corpus [Clotfelter, 1985a, p. 265].

Foundation managers argued that a rate of return on assets generally

represents a real income portion and a portion to compensate for the

effects of inflation. In periods of high inflation, such as 1981, if

income exceeded the payout rate times net investment assets, the

---

[10]Net investment assets are computed as the fair market value of assets not used (or held for use) directly in carrying out charitable purposes less related indebtedness reduced by an allowance for working capital (cash deemed held for charitable activities) defined as 1/2% of the amount computed above.

[11]Qualifying distributions are grants paid out plus administrative expenses to accomplish charitable purposes, amounts paid to acquire assets used or held for use directly in carrying out charitable purposes, amounts set aside for specific charitable projects less an allowance for the 1% or 2% "audit" tax on net investment income.

foundation was required to pay out its entire income, even though a portion of that income was intended to compensate the foundation for the real effects of inflation. A Council on Foundations' study [1977] did find an 11% decline in value of foundation assets from 1977 to 1979 after considering inflation. A Mott Foundation study [1981, p. 1] reported that there was a "severe erosion of the real value of their assets and of grants they make due to inflation, poor stock market performance, and tax laws."

Congress began to relieve foundations of the more uncertain aspects of the TRA of 1969 by changing the payout percentage to a fixed five percent in the TRA of 1976 [Joint Committee Report, 1976] and rescinding the authority of the Treasury to annually adjust the minimum payout rate. Senators Moynihan and Durenberger were the first to respond to charities' pleas for relief and proposed a relaxation of the harsher aspects of the minimum distribution requirements.

Congress acceded to the foundation community in the ERTA of 1981 and removed the net income test for the minimum payout requirement. In the General Explanation of the Economic Recovery Tax Act of 1981, the Joint Committee on Taxation states (pp. 366-367):

> The rate of return that assets generally earn represents a real income portion and a portion to compensate for the effects of inflation. The minimum payout requirement of prior law required that a private foundation distribute the entire amount of its nominal income even though a portion of that income was to compensate the foundation for the effects of inflation. As a result, the effect of the minimum payout requirement of prior law was gradually to reduce the real value of a private foundation's investment assets.

> The minimum payout requirement of prior law was adopted by the Congress when the rate of inflation was low compared with recent rates and, consequently, the effect of the minimum payout requirement was relatively minor. However, recent high rates of

inflation have resulted in significant erosions of the real value of foundation endowments.

While Congress believed that private foundations should only be required to distribute their real income for charitable purposes, the computation of such real income would be difficult. The Congress was also concerned that modification of the minimum payout rule to require payment of real income could have a substantial adverse effect upon the charitable recipients of grants from private foundations.

Accordingly, the Congress concluded that private foundations need only be required to distribute their minimum investment return. The Congress believed that the distribution rule will provide substantial relief to private foundations from the effects of inflation without, in the long term, adverse consequences to the charitable recipients of foundation grants.

The minimum payout currently stands at five percent of net investment assets without regard to income. Removal of the "all net income" test of the minimum payout rule allows foundations to make investments that produce rates of return higher than five percent and retain the excess return. The current rule is designed to benefit foundations that rely heavily on investments as a principal source of income rather than annual contributions, endowment-type foundations. The Act also made it easier to be classified as a private operating foundation and thereby avoid the restrictive laws that apply to nonoperating foundations. Reilly and Skadden [1981] captured the overwhelming sentiment of foundations they surveyed by stating that "the 1981 change is a logical and welcome revision of the payout requirement" (p. vii) and "...(survey) responses support the desirability of this change (p. 13)."

In summary, Congress relaxed the restrictive minimum distribution requirements of the TRA of 1969 in the ERTA of 1981. Thus, Congress responded to foundations and recipient-charities' predictions of impending erosion of foundation asset bases leading to their demise. However,

Congress passed both sets of tax legislation without empirical evidence documenting either pervasive abuse of the foundation entity or harmful effects of the minimum distribution requirements.

This chapter presented the institutional details of the private foundation, nonprofit sector, and tax legislation. The next chapter integrates foundation issues with the previous literature on charitable giving and the nonprofit sector.

Chapter Three

THEORETICAL FRAMEWORK AND PREVIOUS RESEARCH

Economic research on charitable giving to the nonprofit sector provides a framework for examination of private foundations. Studies on charitable contributions, efficiency and equity of tax expenditures, and the role and behavior of the nonprofit sector furnish descriptive characteristics and decision variables that are applicable to foundations. This chapter identifies economic characteristics that are examined across foundations and over time in order to understand foundation spending and investment decisions.

3.1 Charitable Giving Studies

Foundations are economic nonprofit institutions receiving and making charitable contributions. Although charitable contributions have received more attention than other tax expenditures by academic researchers [Clotfelter and Steuerle, 1981], the focus of that research has been on individual donors (see Lindsey [1986] for a review). Virtually no economic analysis exists on the role of the intermediary grant making foundations [Clotfelter, 1985a].

Of the more than eighty studies in a two-year, $2 million study of the voluntary third sector [Commission on Private Philanthropy and Public Needs (Filer Commission), 1975], only four studies specifically addressed private foundation issues. These studies investigated characteristics of both the donor and recipient. The donor is most often described by his or her level of income (e.g., wealthy, middle, and lower income persons),

which is a measure of size. The donee is primarily identified by its primary field of endeavor (e.g., education, health, culture, human service, economics, religion, and other areas). These descriptive variables, size and field of endeavor, are considered relevant in the classification of foundations.

Most of the economic studies on charitable giving focus on an individual's elasticity of giving with respect to income or price (see Feldstein [1980] for a review). Those studies use data aggregated by the IRS, often disguised to protect the privacy of the individual. The studies include general assumptions such as a representative person, constant utilities across taxpayers, charitable giving as a normal good, and single periods (e.g., Barthold and Plotnick [1984], Feldstein [1975], Menchik and Weisbrod [1987]).

The current project departs from previous studies by taking advantage of foundation panel data from publicly available annual tax returns. Since these data for foundations identify the tax reporting entity, foundations can be tracked over time, thus allowing examination both cross-sectionally and longitudinally. The result is a richer development of the environment within which foundations operate.

Efficiency and equity issues are an integral component of public policy studies. Public policy studies look at the effects and benefits of tax incentives and tax regulation over economic entities. Steuerle [1985] advocates expanding our scholarly focus to question whether all tax policies are targeted to efficient and equitable goals. Tax expenditures shift resources to the voluntary third sector. Most tax laws shift resources from the private to the public sector. However, the same public

policy criteria for efficiency and equity can be used to evaluate incentives and regulation over nonprofit entities.

The Filer Commission defined "efficient" in the nonprofit arena as "any stimulus to giving which does not cost significantly more in foregone revenue than the amount of giving actually stimulated." [1975, p. 19] For purposes of this study, it is assumed that private foundations are tax favored because Congress considers them efficient grantmaking organizations that meet the public welfare better than direct government expenditures. Whether this assumption is true is an empirical question. The test of horizontal equity in the private foundation setting is whether the tax code treats "equal" foundations equally. The test of vertical equity is whether the law treats "unequal" foundations differently according to their financial capacities [Boadway and Wildason, 1984].

Although subjective, categories of foundations examined in the literature that can be used as a basis for equality studies are favored donee/public charity recipients [Clotfelter and Salamon, 1982], size [Salamon and Voytek, 1989], and type based on their funding mechanism. Since foundations are in effect donors, similar variables are incorporated in the proposed model of foundation manager behavior regarding payouts.

There is always a tradeoff between the goals of efficiency and equity. Policies to redistribute income often produce misallocations of resources [Browning and Johnson, 1984]. There is little evidence in the literature to suggest that the interaction of incentives and regulation on various foundation sector classifications has been examined with a view toward evaluation of efficiency and equity of the tax laws. Although direct tests of the efficiency and equity of minimum payout requirements

for private nonoperating foundations are not performed in this study, identification of foundation specific characteristics necessary for such studies are useful in understanding why payouts differ across foundations and over time. The groundwork is laid for later work on measuring the efficiency and equity of this tax provision by identifying significant characteristics by which foundations can be classified.

3.2 The Role and Behavior of Foundations

Cushman [1979] has suggested a "theory of foundations" built on expected utility theory. However, little research has been done specifically on foundations to contribute to or empirically test this theory. Serious research into the nonprofit sector began only in the early 1970s, so theories on the "role" and "behavior" of nonprofits are in the early stages of development [Hansmann, 1987]. Since foundations are one component of the nonprofit sector, elements of these emerging nonprofit theories can be adopted into the genesis of foundation theory. The current study views the presence and endurance of the large foundation sector as positive testimony to the role foundations play as an efficient grantmaking intermediary in the nonprofit sector.

The "behavior" theories are most germane to a theory of why payouts differ across foundations and over time. Several treatises in The Nonprofit Sector: A Research Handbook [1987] identify key elements that distinguish the behavior of one foundation from another [Hansmann, p. 37; Ylivisaker, p. 374]. These behaviors are included in the foundation's spending decisions and investment decisions.

Several distinguishing characteristics of independent private

foundations were described in seven separate but interrelated studies in a project sponsored by the Council on Foundations in conjunction with the Program on Non-Profit Organizations (PONPO) at Yale University [E.g., Boris, 1987; Rudney, 1987]. Using different social science methodologies, these studies investigated foundation characteristics such as size, age, and type of charity. Foundations are also distinguished by the manner in which they are funded, by endowments or annual contributions [Odendahl, 1987, p. 32]; although this classification was not formally tested for its validity. Salamon and Voytek [1989] studied the pattern of spending decisions, such as payout rates, and investment decisions, such as rates of return over a five year period.

The elements borrowed from existing behavioral theories of nonprofits include the expected utility maximizing behavior by the foundation manager, demand for the product of "philanthropy," supply of charitable resources, capital constraints, as well as government regulation. Descriptive variables, such as funding-type, size, age, and field of endeavor are applied to the foundation setting. Decision variables representing the spending decision and which capture investment decisions, such as payouts, rates of return, and net worth are examined in the current study of private independent foundation manager behavior.

3.3 Models of Foundation Payout Behavior

Descriptive studies of the private foundation population have been done by the Internal Revenue Service for the tax years 1979, 1982, 1983, and 1985 and are reported in the Statistics of Income Bulletin [Petska (82); Riley (85); Riley (86-87); Riley (89)]. These studies report on the

components of revenue, fair market value of assets, investment assets, grants paid, qualifying distributions, administrative expenses, and excise taxes for a sample of 1,000 to 3,000 foundations across various size categories. The studies complement the descriptive data produced by the Foundation Center (a nonprofit organization) annually in their Foundation Directory, Source Book, and National Data Book. Detail on the percentage of grants given to each "field of endeavor" are also regularly reported in each of these publications.

The early accounting and economic studies on foundations that exist have also primarily described foundation's investment and payout behavior as represented by financial and accounting numbers. Labovitz [1974] was an early attempt to measure the impact of the TRA of 1969 provisions on private · foundations. Although it was an empirical study of 258 foundations with tax information from years 1967 and 1970, the study is merely a descriptive report of certain variables stratified by size. It does not include statistical analyses.

The early foundation literature outlined in Table 3.1 is consistent with classic research objectives. Economic phenomena is first empirically described before moving on to explain and predict the behavior of foundation managers [Abdel-khalik and Ajinkya, 1979, p.21]. These studies are discussed in more detail later in this chapter as well as chapter four.

Table 3.1

FOUNDATION LITERATURE

Author	Methodology	Data Source/ Sample	Time Period
Labovitz [74]	Comparison	388 and 273 foundations	1967 and 1970
Steuerle [77]	Analytical	none	none
Cushman [79]	Regression	326 large foundations	1968 and 1973
Reilly and Skadden [81]	Interviews	39 Michigan foundations	1981
Boris [87]	Survey	435 foundations	1986
Rudney [87]	Survey	367 foundations	1962 and 1982
Odendahl [87]	Interviews	135 millionaires	1986
Salamon and Voytek [89]	Descriptive; Regression	527 foundations Form 990-PF	1979 through 1984

First, a simulation model by Reilly and Skadden [1981] suggests that foundation payouts are dependent upon investment strategies and return, inflation, and payout policies. Although not empirically tested by Reilly and Skadden, liberty is taken to incorporate two variables they identified into a linear model explaining payouts.

Second, two key elements of a normative study by Steuerle [1977] are incorporated into a model describing foundation payouts. This model is tested for its explanatory power on the sample in the current study. Steuerle's objective was limited to presenting analytical arguments in the Filer Commission Report [1975] regarding the efficiency and equity of minimum distribution rules, alternative payout rates, and ways to limit accumulation of foundation wealth without threatening the perpetuity of the foundation sector. However, his work is considered an appropriate start for the development of a theory of foundations within the nonprofit sector.

Finally, some evidence exists to suggest that grantmaking policy of certain foundations is independent of current investment returns. That is, grantmaking policy is as simple as paying out some function of the previous year's distributions [Reilly and Skadden, 1981]. Therefore, a simple time series model of payout rates is examined for several classifications of the sample as an expectation of payout rate.

Examination of these three models is important to determine if payouts are systematic or seemingly random and unpredictable across foundations. Regulation of foundation payout behavior through the tax code rests on the assumption that distributions by foundations to other charities is systematic. If there are categories of foundations that are

insensitive to tax provisions requiring minimum distributions, then tax regulation is not effective with respect to those foundations.

Model 1 - The Reilly and Skadden Model

Reilly and Skadden [1981] surveyed foundation officers to determine the impact of the "net income " payout requirement on investment policies and portfolio composition of Michigan foundations. Their interviews were conducted just before the ERTA of 1981 removed this part of the payout requirement and yet their surveys shed light on the relationship between investment and grantmaking policies by 35 Michigan foundations.

They presented a computer simulation model based on a Mott Foundation study [1981] in which users were asked to supply four inputs: current portfolio composition, expected returns on various classes of securities, an inflation forecast, and a payout policy. The model, then, produced the following output: the portfolio value, income earned, and grants distributed on both a current-dollar and constant-dollar basis.

Although not explicitly stated by the authors, the simulation tool is an optimizing model built on the principles of expected utility theory. That is, if the foundation manager wants the foundation to grow and perpetuate, and foundations are constrained by minimum distribution requirements, then the manager must pay out only what is required by law to avoid an excise tax and ensure that investments earn more than that minimum payout rate. There would be no rational reason to make discretionary payouts (that is, payouts over the minimum required amount).

An optimizing model is a useful tool to understand the behavior of foundation managers [Hansmann, 1987, p. 37]. Foundations are created by individuals with charitable and tax motives and operated by individual

decision makers. Cushman [1979] also used expected utility theory to build a regression model to explain giving and net worth before and after the TRA of 1969. He sampled 326 large foundation for the tax years 1968 and 1973 and tested whether "grants given," the dependent variable, could be explained by market value of assets, current income, rate of return on assets, contributions, officer compensation and other expenses, stock concentration in the investment portfolio, as well as the percentage of ownership of a company represented by these equity holdings.

Cushman found that fair market value of assets, current income, rate of return on assets, and contributions were positively and significantly associated with grants given in both years, as hypothesized. Expenses were statistically significant and negatively associated with grants given as hypothesized. Results on the portfolio composition variables were mixed. His data are consistent with the hypothesis that there is a difference between the coefficients on the explanatory variables for the pre- and post-TRA of 1969 tax regimes.

Expected utility theory, then, is laid as an underpinning beneath the "Reilly and Skadden Model," suggesting that if a foundation intends to grow and perpetuate, managers will only pay out the minimum required by law. Before the ERTA of 1981 that amount was the higher of a "minimum investment return" or all of adjusted net income. Minimum investment return is 5% of net investment assets (see Chapter 2, footnote 10). Adjusted net income is simulated by Reilly and Skadden to be the sum of the real return rate times every portfolio investment item.

Since the current study does not focus on returns of component items to the investment portfolio, and since this information is not available

on private foundations tax returns after 1982, adjusted net income is aggregated as interest, dividend, rents, and capital gain income less expenses that relate to earning this income (see variable 12 on Appendix C). This model for the pre-ERTA years could be stated as:

$$PO_t = B_0 + B_1 \text{ Max[MIR, ANI]} + \epsilon_t$$

In the years following the ERTA of 1981 and the removal of the "all net income" test of the distribution requirement, the model could be stated as:

$$PO_t = B_0 + B_1 \text{ MIR} + \epsilon_t$$

where, PO = qualifying distributions
MIR = minimum investment return
ANI = adjusted net income

These equations model the payout expectations for a foundation that distributes only what is required in order to ensure "continuance" (Reilly and Skadden 1981, p. 16). Foundations that deviate from the minimum distribution requirement can be detected.

A simple linear regression model incorporating two variables identified by Reilly and Skadden, adjusted net income and minimum investment return, is examined in the current study:

$$PO_t = B_0 + B_1 \text{ ANI} + B_2 \text{ MIR} + \epsilon_t$$

The opportunity is taken to empirically test the model suggested by Reilly and Skadden on a sample that includes the 35 Michigan foundations they interviewed in 1981.

Model 2 - The Steuerle Model

Steuerle [1977] criticized the 1969 tax law because it made distributions a function of fluctuating money rates and investment yields. He showed that such an approach was not only administratively difficult,

but failed all three tests of efficiency and equity that he identified for minimum payout rules:

- Horizontal equity should exist such that foundations with conservative investment policies are not forced to make greater distributions.

- Payout rates should not vary with short term fluctuations in nominal interest rates due to inflation.

- Required distributions should not fluctuate from year to year (p. 1666).

He proposed a normative econometric model of minimum required distributions that would meet standards of efficiency and equity. His report was prepared for the Commission of Private Philanthropy and Public Giving [1977] This report presumably played a significant role in Congress' decision to relax the payout rules in ERTA of 1981. It was the only analytical examination of the minimum distribution rule for foundations in the 80 studies in the Filer Commission.

The objective of the Steuerle model of distributions was to build a payout formula which assured stability of distributions. Stability would lead to optimal planning by foundations and increased efficiency in the foundation sector. To accomplish this objective, he suggested that the payout rate should be applied to a base that is the weighted average of the value of the foundation's net worth over several years, rather than just to one year's net worth as the minimum distribution rules currently do [IRC §4942]. Specifically, he suggests that required distributions, the dependent variable, should be a lagged geometric function[1] of previous

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[1]The geometric lag distribution, a popular form of a distributed lag, shows that the effect of explanatory variables on the dependent variable extends indefinitely into the past but the coefficients decline in a fixed proportion so that the effect of the distant values of the explanatory variables becomes negligible (Kmenta, 1986, p. 528). A

years' distributions and the asset value of the portfolio, with less and less weight placed on the earlier years. He showed that there was a wide range of payout rates that would allow the government to limit the relative wealth of foundations without in any way threatening their survival, growth, or perpetuity.

If we assume that the foundation has an objective of growth and perpetuity and as such the manager will pay out only what is required, then in the absence of new contributions and inflation, there will be no discretionary payouts and Steuerle's normative model can be used to evaluate how equitable and efficient actual distributions are. That model is given by:

$$PO_{t+1} = (1 - \beta) PO_t + \beta[\alpha A_{t+1}]$$

where,

PO_t = Annual payouts for year t
A_t = Asset value at the beginning of year t
α = payout rate
β = an arbitrary number indicating the proportion of the total base to be determined by the value of the portfolio in the current year (such as .5 for equal weighting)

Required distributions in a given year, then, can be viewed as a weighted average of distributions in the previous year and the payout rate times value of assets during the current year. When inflation (i) and new contributions (C) are incorporated into the model, the equation is given as

$$PO_{t+1} = (1-\beta) (1 + i_t) PO_t + \beta[\alpha (A_{t+1} - C_t)] + \alpha C_t$$

The current study incorporates the two explanatory variables used by Steuerle into a simpler linear relationship given by:

Koyck transformation can be used to simplify the equation.

$$PO_t = \beta_0 + \beta_1 PO_{t-1} + \beta_2 A_t + \epsilon_t$$

This model is tested for its ability to explain foundation payouts as a function of the previous year's payouts and the fair market value of assets. The simplest functional form is used in this initial empirical investigation of the model.

Model 3 - Time Series Model

Surveys of foundation managers have revealed that some grantmaking policies are as simple as making distributions with reference to payouts made in the past year, rather than driven by current income or investment strategy, minimum distribution requirements of the tax law, or net worth [Salamon and Voytek, 1989, p. 48]. Foundation managers can choose to focus on grant commitments, program goals, and needy projects. If necessary, managers can generate additional gifts to the foundation [Reilly and Skadden, 1981, p. 18].

To assess the relationship between current year's payouts and payouts from the previous year, a simple, deterministic time series model can be used. Econometricians have usually used time series models to extrapolate a pattern for some economic variable to forecast its future behavior on the basis of its past behavior. However, the explanatory ability of the model can also provide insights. A deterministic (or fixed) model is a more appropriate extrapolative model than a stochastic one in this initial step because the focus is on the past behavior of the variable being predicted (payouts) and not on other explanatory variables [Kennedy, 1985, p. 205]. No reference is made to the sources or nature of the underlying randomness in the series [Pindyck and Rubinfeld, 1981, p. 473].

The relaxation of the minimum distribution requirement in the ERTA of 1981 was expected to favorably impact foundations' net worth and presumably alter their payout and investment policies such that more economically efficient decisions could be made. This tax law change can be viewed as an "interruption" in the time series of payouts. Just as behavioral researchers examine observations before and after the "treatment" [Cook and Campbell, 1979, p. 207], economic and accounting researchers have examined a variable of interest before and after a tax law change [Scholes and Wolfson, 1990].

To take advantage of the panel data, data for the same entities over time, an indicator variable identifying the foundation is also included. A linear, deterministic, time series model of payouts is given by:

$$PO_t = \beta_0 + \beta_1 PO_{t-1} + \beta_2 ERTA + \beta_3 ID + \epsilon_t$$

where,

PO	=	annual payouts (qualifying distributions)
ERTA	=	dummy variable which is equal to 1 for the pre-ERTA tax regime (years between 1976 and 1981); 0 for the post-ERTA period (years between 1982 and 1987)
ID	=	unique identifying number/label assigned to each foundation
t	=	year t
ϵ	=	error term

The sample period under investigation in this study is shown in Figure 2.

SAMPLE TIME PERIOD

PRE-ERTA of 1981   POST-ERTA of 1981
   Tax Regime   Tax Regime

76   77   78   79   80   81 | 82   83   84   85   86   87

Dummy = 1   Dummy = 0
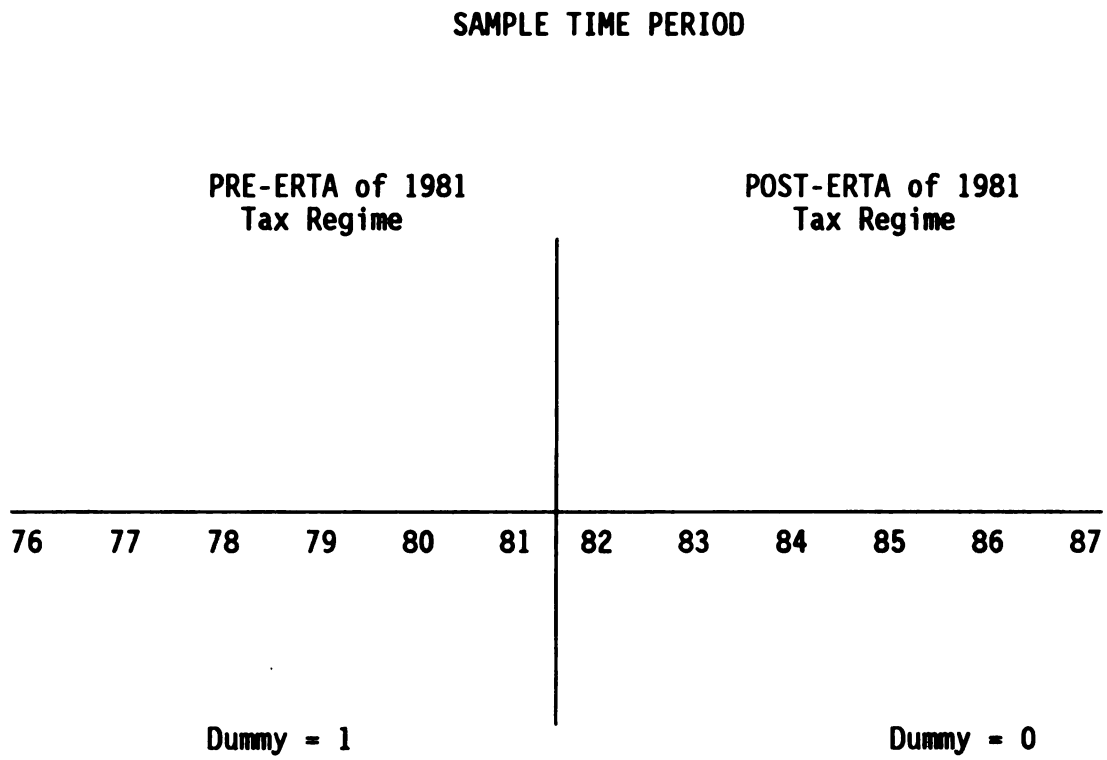
Figure 2

3.4 Limitations of the Theory and Research

3.4.1 Integration of Foundations into Nonprofit Theory

The recent attempts to build a theory of the nonprofit economy and the institutions within it have neglected to recognize the unique role of private foundations. Private foundations are an intermediary institution. They accept charitable contributions from donors and manage endowments and new contributions. They then distribute grants for worthwhile charitable purposes currently and in the future [Reilly and Skadden, 1981, p. 17]. This study addresses the unique role of private foundations by applying relevant components and variables from the nonprofit literature to the initial development of a theory of foundations and a model of foundation payout behavior.

Of the studies that do attempt to document trends in investment and payout practices of private foundations over time, only one [Salamon and Voytek, 1989] has examined trends before and after the relaxation of the minimum distribution rules in the ERTA of 1981. That study, as well as annual reports from the Foundation Center and periodic Statistics of Income studies from the IRS fail to distinguish between pure endowment-type funds, the target of minimum distribution rules, and flow-through foundations. The current study investigates the importance of funding-type as a distinguishing characteristic and provides more analysis of the difference between pre- and post-ERTA tax regimes on foundations.

3.4.2 Data Sources

The descriptive studies of the Foundation Center and the IRS's Statistics of Income focus on large foundations. Consequently, foundations that may be small when measured by fair market value of assets

or grants given but large with respect to the number of foundations are underrepresented. The studies in Table 3.1 that are empirical in nature [Labovitz (1974); Cushman (1979)] sample two years that may not contain the same set of foundations. Although Salamon and Voytek [1989] do sample the same foundations over a five year period, they were only able to assemble complete sets of tax return information for 46% of their surveyed sample and this set includes only three years in the post-ERTA tax regime. They then "blow up" the sample using weighting techniques to represent the universe of foundations.

The current study compiles data for the longest period yet studied for foundations, six years before and six years after 1981, and for the same panel of foundations over the twelve year sample period. Both large and small foundations that survived the two tax regimes are represented in the sample.

This chapter reviewed the previous literature on foundations and the nonprofit sector. Funding-type, size, age, and field of endeavor have been discussed as characteristics that distinguish nonprofit entities. Focus has been on the investment and spending decisions of these entities. The next chapter proposes a model of foundation payouts and hypotheses based on characteristics identified in the literature.

Chapter Four

PROPOSED MODEL AND HYPOTHESIS DEVELOPMENT

This chapter explores why foundation managers make different economic decisions across foundations and over time by proposing a model of the payout decision process. Chapter 3 identified descriptive variables, decision variables, and two tax regimes from the literature on charitable giving, the nonprofit sector, and foundations that are incorporated into a proposed model. This proposed model specifically attempts to explain payout rates as a function of those independent stratifying variables, decision variables, and tax regime. The purpose of this step is to move beyond description of economic variables to inference, characterizing the decision making process of foundation managers with respect to payouts and the impact of tax laws on that process.

4.1 Proposed Model

The amount a foundation distributes to other operating charities depends upon philosophies shared by the creator of the foundation and those who manage it, demographic characteristics of the foundation, economic factors, and current tax provisions constraining the actions of foundation managers. The following model of foundation payout rates is proposed:

$$\text{PAYOUT RATE}_{it} = \beta_0 + \beta_{1it} \text{ FUNDING TYPE} + \beta_{2it} \text{ SIZE}$$
$$+ \beta_{3it} \text{ AGE} + \beta_{4it} \text{ FIELD OF ENDEAVOR} + \beta_{5it} \text{ RETURN}$$
$$+ \beta_{6it} \text{ NET WORTH} + \beta_{7it} \text{ ID} + \beta_{8it} \text{ ERTA}$$
$$+ \epsilon_{it}$$

where:

PAYOUT RATE = payout rate
i = i th foundation, $i = 1..N$
t = t th year, $t = 1.. T$
ϵ = error term

The dependent variable, payout rate, and the explanatory variables with their alternative measures are described in the following sections.

4.1.1   Dependent Variable: Payout Rate

Payout rates are posited to be linearly associated with measures of explanatory variables grouped into three factors (philosophical, demographic, and economic) and to be responsive to different tax regimes. Payout rates have been reported in many descriptive studies of foundation behavior; however, criticism has been raised over conclusions drawn from differing measures of payout rates [Boris, 1988]. Payout rate, in general, means the amount a foundation has committed for distribution to other charities as a percent of the assets it has available to distribute.

In this study the most common measure of payout rate is used in order to compare results to the few studies that compute payout rate; for example, periodic Statistics of Income studies [IRS], the Salamon and Voytek study [1989], and the earlier study by Cushman [1979]. That is,

$$\text{Payout Rate1} = \frac{\text{Qualifying Distributions}}{\text{Average net investment assets}}$$

Boris [1988] suggests that alternative ratios may influence results

and consequently conclusions that are drawn. She suggests "grants distributed to other charities"; "grants, taxes, and administrative expenses"; or "grants, taxes, administrative expenses, program related investments, and carryforwards"; as alternative numerators in the relationship. "Qualifying distributions" includes not only grants and operating expenses, but also amounts set aside for charitable purposes in the following year.

Qualifying distributions, as a numerator, captures all of the suggested components except carryforwards. Although it is true that foundations can make their minimum distribution in the current year or the following year, it is assumed in this study that carryforwards stay relatively constant over time and as such are not considered in the payout rate.

Boris suggests "net investment income" as an alternate denominator in the payout ratio. This ratio, the amount paid out as a percentage of the current income available for distribution, may identify foundations that are dipping into their corpus or endowment. That is, if the payout rate computed in this manner is greater than 100 percent, then, funds for distribution must have come from the foundation's endowment of assets. The sensitivity of the results to this measure is tested:

$$\text{Payout Rate2} = \frac{\underline{\text{Qualifying Distributions}}}{\text{Net investment income}}$$

Measures of independent stratifying factors hypothesized as descriptive foundation specific characteristics that will distinguish foundations from each other and explain foundation payouts are discussed in the next sections.

4.1.2   Philosophical Factors

One of the factors influencing the amount a foundation chooses to distribute to other charities is the explicit and implicit philosophies established by the incorporating donor and interpreted by the Board of Directors. These philosophies may or may not be written, could change over time, and cover such structural areas as how the foundation will be funded, its rate of growth, and the investment and grantmaking policies.

Funding Mechanism   The source of funds for a foundation can come either by gift from a living donor or through the terms of a testamentary trust or will. There is no evidence to suggest that the donor's philosophies over the mission or operation of the foundation will be more clearly stated in one legal vehicle over the other. However, the funding mechanism will be evident. Either the donor (1) endows the foundation with a gift that will generate interest, dividend, or rental income over the life of the foundation; or (2) makes periodic gifts to the foundation.

It is believed that managers of a foundation with an endowment are motivated by different concerns than those managers of a foundation that functionally acts as a conduit, accepting funds from the donor and "flowing-through" those gifts to public charities. For example, the minimum distribution provision of the tax code is intended to constrain only endowment-type foundations that have the potential to act as tax-exempt "pocketbooks" by those who formed them. Such foundations allow the donor to receive an immediate charitable contribution for a donation, maintain virtual control over the assets, and postpone the time the assets get in the hands of the needy.

Most charities are expected to fall clearly into one of these two

categories. A ratio of contribution revenue to interest and dividend revenue measures the degree to which a foundation is of the "flow-though type" as opposed to the "endowment-type." At present, none of the foundation studies reporting payout rates distinguishes between these two types of foundations.

Clearly though, a "flow-though" foundation may have a payout rate over one thousand percent if payout rate is measured as qualifying distributions divided by net investment assets which may be negligible. Inclusion of foundations with relatively small asset bases will skew any measure of average payout rate towards the high end. This study stratifies the sample by this characteristic, checks the ratio for its stability over time, and analyzes each type separately.

Growth Policy   The foundation benefactor may also explicitly state the growth policy of the foundation; that is, limited growth and termination at a specific point in time, no growth, or growth and perpetuity [Steuerle, 1977]. Statements addressing the growth policy may be found in the incorporating documents, annual reports to the public, or annual reports to the State's Department of Commerce. The Fleishmann Foundation is an example of a foundation designed to terminate twenty years after the death of the donor's wife [Boris, 1987, p. 141]).

Even though foundation critics have advocated limiting a foundation's life to minimize the concentration of wealth and influence [Freemont-Smith, 1965, p. 51], Congress has consistently refused to put this constraint on foundations. However, the interaction of minimum distributions rules and unexpectedly high inflation or required payout rate higher than realized returns on investments may effectively limit the

life of a foundation in the absence of new contributions.

Only foundations with growth policies of "grow and perpetuate" are examined in this study. It is believed that these foundations are the target of regulatory tax provisions. These foundation managers have an incentive to pay out only what is required by law or at least to manage assets so that investment income and new contributions exceed the minimum payout requirement allowing the foundation to grow and perpetuate.

Grantmaking Policy   A foundation's grantmaking policy is the most likely explanation of its annual payouts. However, Reilly and Skadden [1981] found that these policies vary widely and are not always in writing. Foundations reported grantmaking policies such as (p. 18):

- Pay out six percent of assets
- Pay grants to deserving projects out of income, then capital
- Distribute all income to one-shot projects only
- Make income and cash reserves available for grants
- Fix annual disbursements
- Let income determine the level of grants
- Let grant commitments determine investments
- Let investment results determine grants
- Let the payout rule determine investments, which in turn determines grants
- No direct link between investment strategy and grants
- Pay out income and principal; the foundation is self-liquidating
- Pay out income; concern is to maintain purchasing power of grants
- Pay all income plus two percent of corpus as grants
- Determine grants using the minimum payout under the payout rule

These policies are either "selfish" in which the foundation strives to maintain its asset base, or "altruistic" and focused on grant programs for either the present or future [Boris, 1987]. In general, grants can be a function of assets, current income, or independent of investments and income. It is assumed in this study that grantmaking policy is not a reliable predictor of annual payouts; statements of this policy are not readily available, may not be agreed upon by the foundation officers, and

may not remain constant over time. However, the annual report on file with the State is examined for all foundations to ensure that they have claimed a term of existence of "perpetuity." Table 4.1 outlines the levels of the philosophical factor considered in the proposed model as well as other geographic, economic, and tax factors influencing a foundation's payout rate that are now discussed.

Table 4.1

MEASURES OF THE INDEPENDENT VARIABLES

FACTORS:	LEVELS:
PHILOSOPHICAL Funding Mechanism	1 = Endowment Type
	2 = Flow-Through Type
DEMOGRAPHIC	
Size (FMV of assets)	1= < $100,000
	2= $100,000 to $500,000
	3 = $500,000 to $1 million
	4 = $1 to $5 million
	5 = $5 to $10 million
	6 = $10 to $50 million
	7 = $50 to $100 million
	8= > $100,000,000
Age (date of incorporation)	1 = Pre-1950
	2 = 1950 - 1969
	3 = Post-1969
ECONOMIC	
Demand: Field of Endeavor	1= Medical/educational
	0= All others
Supply: Return on Investment	4 continuous measures
Net Worth	3 measures (Assets less Liabilities)
TAX (Tax Regime)	PRE-ERTA 1 = 1976 - 1981
	POST-ERTA 0 = 1982 - 1987

4.1.3   Demographic Factors

Factors such as size, age, and geographic location of foundations may influence the amount managers choose to pay out to charities each year.

Size Salamon and Voytek [1989] found that size seemed to be significantly related to payout rates. The average annual payout rate for all foundations was 7.8 percent of assets, although large foundations paid out an average of six percent of assets, while small foundations paid out over eight percent. Both averages exceed the required minimum distribution of five percent of net investment assets, suggesting that some foundations may not be influenced by the required distribution provisions. Size is included in this study as an independent stratifying variable. Eight strata are selected that correspond to the levels reported annually by the Foundation Center. The measure of size used most often in Statistics of Income and National Data Book reports is fair market value of assets. That measure is also used in this study although alternative measures include book value of assets, net worth, and qualifying distributions.

Age There is some evidence to suggest that older, well established foundations, set up under quite different economic times and tax regimes, are very much different than more recently established foundations [Boris, 1987]. Notably, there have been no "large" foundations created in the last forty years that match the relative magnitude of endowment that characterize foundations formed in the early part of the century. If this phenomena can be attributed to tax laws, then division of the twentieth century into three "ages" (depending on the incorporation date or date of exemption letter from the IRS) could help identify whether new foundations

differ from old foundations. These ages, closely identified with tax regimes are: pre-1950, a time with tax incentives without regulation; 1950 to 1969, the first period of regulatory oversight by the IRS through excise taxes; and post-1969, the period of restrictive minimum distribution as well as other regulatory rules.

Geographic Area The National Data Book categorizes foundations by nine different geographic regions in the United States: Mid-Atlantic, East North Central, Pacific, West South Central, South Atlantic, West North Central, New England, Mountain, and East South Central. Ylivasker [1987] finds that the Middle Atlantic and East North Central regions pay out more than other regions. That finding may be due to the concentration of the largest and oldest foundations in the New York area. Colwell [1980] even suggests that there is an atmosphere of competition among foundations in the grants they distribute that may be related to the foundation concentration by geographic area. Foundations from one region, East North Central, are examined in the current study because of data availability.

4.1.4 Economic and Tax Factors

The private foundation is very much an American economic institution and as such is expected to respond to supply and demand factors as well as tax constraints.

Supply of Funds The amount a foundation can pay out must depend on its supply of funds. This supply is made up not only of new contributions and net worth, but also current return on investments reduced by administrative expenses. Current interest and dividend income, as well as gains and losses on the sale of investments, are not only a function of the market conditions for the year but also of the investment strategy of

the foundation.

These strategies can be described as total return (inflation adjusted), income oriented, control level of risk, or diversified. Reilly and Skadden [1981] found that few foundations had clear, written investment strategies. Foundations may decide on a target amount of funds to pay out and then actively manage their investments and control their expenses to meet that goal. On the other hand, foundations may passively respond to the results of operations for the year and make distributions accordingly.

Research on private foundations does incorporate investment as a critical function of the foundation manager [Reilly and Skadden, 1981; Cushman, 1979; Salamon and Voytek, 1989]. However, assumptions are made about the portfolio composition and investment strategies of foundations in these studies because data are not easily available on these issues. The annual tax forms for private foundations [Form 990-PF] stopped requiring detailed breakdown by type of investment in 1982.

In this study, a simple measure of rate of return on the fair market value of assets is first examined. Then, the measure of return used by Salamon and Voytek [1989, p. 32] is employed without an inflation adjustment, followed by an adjustment based on the Consumer Price Index (CPI) and the Gross National Product Implicit Price Deflator (GNP IPD). Salamon and Voytek's measure is

> ...designed to approximate the "unit method" that investment analysts use to track investment performance in circumstances where there are extensive inflows and outflows from an investment fund [Salamon and Voytek, 1989, p. 32].

The Salamon and Voytek study simply deflates this return by eight

percent, the average inflation rate for the period under study (1979 to 1983). In this study, the actual CPI and GNP IPD for the years examined are used and the sensitivity of the results to these measures is examined.

Return1 $\dfrac{\text{Interest and Dividends}}{\text{Fair Market Value of Total Assets}}$

Return2 $\dfrac{\text{End. FMV of Assets - Beg. FMV of Assets - Gifts + (Grants + Operating Expenses + Taxes)}}{\text{Beg. FMV of Assets + [Gifts/2]}}$

Return3 $\left\{ \dfrac{\text{(End. FMV of Assets - Beg. FMV of Assets - Gifts + (Grants + Operating Expenses + Taxes)}}{\text{Beg. FMV of Assets + [Gifts/2]}} \right\}$ / CPI

Return4 $\left\{ \dfrac{\text{(End. FMV of Assets - Beg. FMV of Assets - Gifts + (Grants + Operating Expenses + Taxes)}}{\text{Beg. FMV of Assets + [Gifts/2]}} \right\}$ / GNP IPD

<u>Demand for Funds</u> Foundations are also responsive to the demand for their funds. The needs of various "fields of endeavors," change over time. Such fields include:

- medicine and health
- education and scholarships
- culture, arts, and humanities
- economic development, civic, and public affairs
- science
- religion
- human service and social welfare
- other areas

Foundations that focus their resources on a few fields of endeavor may respond similarly when particular needs become apparent. In a reference book guiding foundations through the incorporation and initial stages of business, Oleck [1988, p. 194] suggests limiting the focus of the foundation to one or two fields of endeavor for more effective accomplishment of the incorporator's goals.

Barthold and Plotnick [1984, p. 233] argue that charitable gifts and bequests are not homogeneous goods; that is, grants to a public charity-donee specializing in educational or health concerns are different from a grant for culture, human services, economics, or other fields of endeavors. Clotfelter and Salamon [1982] previously found that donors' income status is associated with the recipient charity; that is, the wealthy tend to give to educational institutions and hospitals while lower income people favor religious organizations (also see Feldstein [1975], Clotfelter [1985b]). Charitable giving has also been shown to have negative price elasticities [Feldstein, 1975], so that reductions in the top marginal tax rate of the ERTA of 1981 were expected to be associated with decreases in charitable giving to educational institutions and hospitals by the wealthy without a corresponding drop in gifts to religious organizations.

Since foundations are established primarily by the wealthy, those foundations that give primarily to medicine and health related donees as well as to educational institutions may respond similarly to increased needs in these areas. Foundations are stratified by the relative percent of grants made to these two fields of endeavor versus all other donees. Classification of grantmaking by field of endeavor is obtained either in the Michigan Foundation Directory, the Foundation Center's Source Book Profiles, or by the foundation's response to a survey (see Appendix B for the survey instrument).

Tax Factor Another factor affecting the amount foundations distribute is the constraint of tax regulation. The impact of a tax law change on charitable giving, and indirectly the use of foundations as a giving

vehicle, is the product of the combined effects of changes in top marginal rates, estate and gift laws, and excise taxes on foundation activity. A period of continuity in the tax law (tax regime) can be examined for its overall impact on the correction of inefficiencies and inequity of an activity since Congress does not design _de novo_ tax systems [Feldstein, 1980]. For this study, the changes in the minimum distribution rules of ERTA are seen to clearly divide the 1976 to 1987 period into two tax regimes; the pre-ERTA period (1976 to 1981) in which foundations were constrained by tax law, and the post-ERTA period (1982 - 1987), in which foundations were monitored by Congress through tax laws but generally less restricted in their economic decisions. A dummy variable is used in the regression of the proposed model to reflect the tax law changes in ERTA which "interrupted" the time series.

The four models investigated in this study are summarized in Figure 3.

THE MODELS

Model 1: (The Reilly and Skadden Model)

$$PO_t = B_0 + B_1 \text{ ANI} + B_2 \text{ MIR} + \epsilon_t$$

Model 2: (The Steuerle Model)

$$PO_t = B_0 + B_1 PO_{t-1} + B_2 A_t + \epsilon_t$$

Model 3: (Proposed Model)

$$PORATE_{it} = B_0 + B_{1it} \text{ FUNDING TYPE} + B_{2it} \text{ SIZE}$$
$$+ B_{3it} \text{ AGE} + B_{4it} \text{ FIELD OF ENDEAVOR}$$
$$+ B_{5it} \text{ RETURN} + B_{6it} \text{ NET WORTH}$$
$$+ B_{7it} \text{ ID} + B_{8it} \text{ ERTA} + \epsilon_{it}$$

Model 4: (Time Series Model):

$$PO_t = B_0 + B_1 PO_{t-1} + B_2 \text{ ERTA} + B_3 \text{ ID} + \epsilon_t$$

where:

PO_t	=	Payouts (qualifying distributions) for year t
PORATE	=	Payout rate for the year
MIR	=	Minimum investment return (5 percent of net investment assets)
ANI	=	Adjusted net income
A_t	=	Asset value at the beginning of year t
ERTA	=	dummy variable which is equal to 1 for the pre-ERTA tax regime; 0 for the post-ERTA period
i	=	i th foundation, i = N
t	=	t th year, t = 1.. T
ϵ	=	error term

Figure 3

4.2 Hypotheses

Hypotheses are not formally stated in the past literature. However, the economic and accounting literature addressing foundation issues has identified descriptive characteristics that are hypothesized to be related to decisions made by foundation managers. The current study first hypothesizes that the three descriptive variables[1], funding-type, size, and age, discriminate among foundations with respect to the decision variables.

The literature suggests that the older foundations are more likely to be large and of the endowment type, earning higher rates of return because of their expertise. Because older foundations have a policy to grow and perpetuate, managers are motivated to pay out only what is required by law. Net worth, a proxy for size as well as the result of earning more than is paid out over time, is also expected to be relatively high for foundations fitting this profile.

These predicted relationships can be summarized in this manner:

Type and Size	-
Type and Age	+
Type and Payout Rate	+
Type and Rate of Return	-
Type and Net Worth	-
Size and Age	-
Size and Payout Rate	-
Size and Rate of Return	+
Size and Net Worth	+
Age and Payout Rate	+
Age and Rate of Return	-
Age and Net Worth	-
Payout Rate and Rate of Return	+
Payout Rate and Net Worth	-
Rate of Return and Net Worth	+

---

[1]See footnote 3, chapter 5 for an explanation of why "field of endeavor" is dropped from the discussion.

The first set of hypotheses that relate to the correlation of the descriptive and decision variables are stated as alternatives to the null hypothesis of no association:

H_1: Funding type is positively associated with age and payout rate and negatively associated with size, rate of return, and net worth.

Size is negatively associated with age and payout rate but positively associated with rate of return and net worth.

Age is positively associated with payout rate and negatively associated with rate of return, and net worth.

Payout rate is positively associated with rate of return and negatively associated with net worth.

Rate of return is positively associated with net worth.

There is a consensus that the ERTA of 1981 was effective in meeting Congressional intent. The intent of eliminating the "pay out all net income" part of the minimum distribution rule was to remove the unfair penalty to endowment-type foundations for earning high nominal rates of interest in times of inflation. This change is expected to cause foundations previously subject to the "all net income" requirement to lower payout rates to "5 percent of net investment assets" if they intend to grow and perpetuate. Therefore, it is expected that there is a significant difference between the periods before and after the ERTA of 1981 and that foundations are better off in the post-ERTA period. A hypothesis that describes the expected difference between two tax regimes is given by:

H_2: Payout rates after 1981 are lower than during the period 1977 to 1981 for endowment-type foundations with a policy to grow and perpetuate.

The elimination of the "all of adjusted net income" requirement of the minimum distribution rule in the ERTA of 1981 was expected to free

foundations to invest in more risky but higher yielding securities. Under the tougher distribution rules, there was little incentive for foundations that intended to grow and perpetuate to earn high rates of return since that amount would have to be distributed to charity in that year or the following year. This change in investment policy should be reflected in the foundation's rate of return on its assets. The relationship between rate of return and tax regime is hypothesized to be:

H_3: Rate of return is higher after 1981 for all foundations than for the period 1977 to 1981.

If payout rates decline in the post-ERTA period, then it is expected that the net worth of the foundation will increase. That is, if less funds are distributed to charity and retained in the foundation, the residual of assets over liabilities, or net worth, should be higher. The following relationship between net worth and tax regime is hypothesized:

H_4: Net worth is higher after 1981 for all foundations than for the period 1977 to 1981.

Size is the only characteristic that has been empirically shown to be related to payout rates [Salamon and Voytek, 1989]. They found a negative correlation between size and payout rates; that is, the smaller foundations paid out a higher percent of their available funds than did the larger foundations. This relationship is also examined in this study for a different sample.

H_5: Small foundations pay out more than large foundations over time.

It is also expected that the models have significant ability to explain payouts for foundations over time. In particular, the explanatory variables are expected to have the following effects on payouts or payout rates:

Model 1 (Reilly and Skadden):

    Minimum investment return (MIR)   +
    Adjusted net income   (ANI)   +

Model 2 (Steuerle):

    Previous year's payouts (PO_{t-1}) +
    Fair market value of assets (A)   +

Model 3 (Proposed):

    Funding-Type (TYPE)   +
    Size (SIZE)   -
    Age (AGE)   +
    Field of Endeavor   ?
    Rate of Return (RETURN)   +
    Net Worth (NW)   +
    Tax Regime (ERTA)   -
    Foundation ID   +

Model 4 (Time series)

    Previous year's payouts (PO_{t-1}) +

This chapter proposed a model of foundation payouts incorporating variables identified in the previous literature on nonprofit entities. Hypotheses are posited about the relationship among variables in the proposed model and the models themselves. The next chapter discusses the research design and methodology employed to test these hypotheses and models.

Chapter Five
RESEARCH DESIGN AND METHODOLOGY

The purpose of this chapter is to describe the empirical procedures employed to examine the variables, models, and hypotheses developed in the previous chapters. First, an overview of the research design used to conduct the study is provided.

Second, the sample selection procedures employed to identify the foundations in the panel data base are described. Third, the methods used to analyze the independent stratifying variables and decision variables across tax regimes are defined. Finally, the statistical procedures used to analyze two models cross-sectionally, one longitudinally, and the proposed model are presented along with particular panel data issues.

5.1 Overview of the Research Design

Descriptive patterns of economic phenomena regarding foundations are needed to discern trends over time and distinguishing characteristics across foundations before the question of why foundation behavior differs can be investigated. Descriptive characteristics identified in the literature, such as funding type, size, age, and primary field of endeavor are first described and then correlated with "decision" variables representing the results of decisions made by foundations managers with respect to spending and investment. Figure 4 outlines the research design of this study.

RESEARCH DESIGN

<u>DESCRIPTIVE VARIABLES</u>   <u>DECISION VARIABLES</u>

```
┌─────────────────┐              ┌─────────────────┐
│ FUNDING-TYPE    │──┐        ┌──│ PAYOUT RATES and│
└─────────────────┘  │        │  │ PAYOUTS         │
                     │        │  └─────────────────┘
┌─────────────────┐  │        │  ┌─────────────────┐
│ SIZE            │──────────────│ RATE OF RETURN  │
└─────────────────┘  │        │  └─────────────────┘
┌─────────────────┐  │        │  ┌─────────────────┐
│ AGE             │──┘        └──│ NET WORTH       │
└─────────────────┘              └─────────────────┘
```
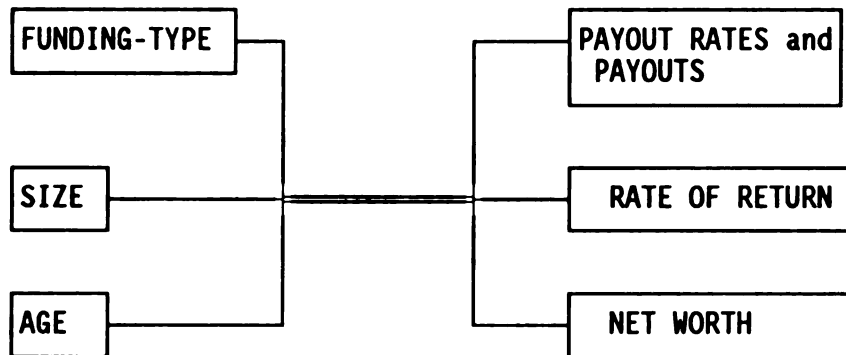
Descriptive Stage:

1. Describe each variable   Univariate statistics
                                            Graphs

2. Correlate variables   Pearson Product-Moment and
                                            Spearman Rank correlations

3. Measure the cross   Chi-square test of association
    frequencies of
    variables with each
    other

4. Examine the differences   t-test of paired means
    between pre- and post-ERTA
    means of decision variables

Models of Foundation Payouts:

Model 1:   Qualifying Distributions = f [ANI, MIR]   (OLS)*

Model 2:   Qualifying Distributions = f [PO $_{t-1}$, A$_t$]   (OLS)

Model 3:   Qualifying Distributions = f [PO $_{t-1}$, ERTA, ID]   (WLS)

Model 4:   Payout Rates = f [SIZE, AGE, RETURN, NW, ID, ERTA]   (OLS)

*   OLS is ordinary least squares regression
    WLS is weighted least squares regression

Figure 4

These decision variables of interest (payout rates, rates of return, and net worth) are examined in two different time periods. The pre-ERTA tax regime is one in which foundation managers were constrained by strict required minimum distribution rules. The post-ERTA period is one in which the distribution requirements were relaxed. Manager's decisions in the two time periods are compared in order to assess whether there is a difference between the two tax regimes with respect to foundation manager behavior.

A causal analysis in not possible. There are many provisions in the tax law change that influence taxpayer behavior in different directions, as well as many economic non-tax variables that affect decision making and results of operations for any entity. The current study is a preliminary look at two time periods in which constraints for foundation managers were quite different.

After documenting significant characteristics and trends, three models of foundation payouts, suggested by the literature, are empirically tested for the first time in order to investigate the influence of certain explanatory variables on manager payout decisions. Only foundations in existence for the entire test period and with growth policies of "growth and perpetuity" are examined. "Endowment-type" foundations are analyzed separately from "pass-through" foundations. A proposed model specifically designed to test the relationship of certain explanatory variables and payout rates is also examined in order to provide an initial framework for future investigation of these relationships. This proposed model incorporates an identifying variable to take advantage of the panel data.

A panel data base of independent private nonoperating foundations is

developed for a twelve year test period, representing six years before and after the ERTA of 1981 (1976 to 1987). This period is chosen because publicly available data from annual tax returns (Form 990-PF) were first made available on microfiche by the IRS in 1976 and 1987 was the most recent year for which a complete set of tax returns were available for the sample[1].

5.2   Sample Selection and Panel Data Base

The   target   population,   independent   private   nonoperating foundations, is identified from the foundation population listed in the National Data Book [The Foundation Center, 1989]. Corporate, operating, and community foundations are not investigated in this study (see Table 5.1). Michigan foundations are chosen as the survey population because data from the annual tax returns, Form 990-PF, are readily available on microfiche in the Foundation Center's regional libraries housed at Michigan State University (MSU), University of Michigan, and Wayne State University. Since there are no computerized longitudinal data bases of foundation tax return information available to the public, it is expected that the benefits that arise from manually creating a twelve year panel data base exceed that which come from a nationwide survey. Of course, results can only be generalized to the Michigan independent private nonoperating foundation. However, focusing on one state may minimize any effect that geographic location plays on payout decisions.

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[1]Tax returns for the years 1988 and 1989 are now available for some foundations depending on their fiscal year end. These years will be appended to the panel data base and analyzed in future extensions of this research.

Table 5.1

NUMBER OF FOUNDATIONS BY TYPE

	Nation	Michigan
Community Foundations	232	19
Private operating foundations	1,040	24
Private corporate foundations	1,295	46
Independent private nonoperating foundations	25,094	753
All foundations	27,661	842

Sources: Michigan Foundation Directory (6th ed.)

            National Data Book (Vol. 13, 1989)

Note: The number of foundations differs from Figure 1 in Chapter 2
            due to different time periods.

A stratified systematic sample is selected (see Panel A, Table 5.2). 100 percent of the foundations with assets exceeding $1,000,000 are included as well as 25 percent of the foundations in strata below $1,000,000 (every fourth one in the National Data Book sequence). Large foundations are presumably the target of most tax legislation because they are the most influential of the foundation population. Only twenty percent of all the foundations have fair market value of assets exceeding $1,000,000; yet this segment accounts for eighty-five percent of all the grants made [Riley, 1989, p. 27].

Clearly, though, small foundations having asset bases less than $1,000,000 represent at least eighty percent of the number of grant-making foundations [Riley, 1989, p. 27] and as such are not overlooked in this study. In order to ensure that significant "flow-through" foundations, which may have no assets, are included in the study, foundations are also stratified by amount of grants given (see Panel B, Table 5.2) and 100 percent of foundations which gave more than $1,000,000 a year are included. An initial sample of 318 Michigan foundations is identified.

Table 5.2

NUMBER OF FOUNDATIONS BY SIZE

PANEL A. FAIR MARKET VALUE OF ASSETS

	Nation	Michigan	Sample	% of MI
> $250,000,000	52	3	3	100%
100,000,000 - 250,000,000	84	3	3	100%
50,000,000 - 100,000,000	141	4	4	100%
10,000,000 - 50,000,000	877	15	15	100%
5,000,000 - 10,000,000	876	27	27	100%
1,000,000 - 5,000,000	3,785	120	120	100%
500,000 - 1,000,000	2,669	88	22	25%
250,000 - 500,000	3,053	102	26	25%
100,000 - 250,000	4,315	137	34	25%
50,000 - 100,000	2,666	97	24	25%
25,000 - 50,000	2,080	49	12	25%
10,000 - 25,000	1,856	46	12	25%
< $10,000	2,640	62	16	25%
TOTALS	25,094	753	318	

Table 5.2 (cont'd.)

PANEL B. GRANTS PAID OUT

	Nation	Michigan	Sample	% of MI
> $25,000,000	22	3	3	100%
10,000,000 - 25,000,000	42	2	2	100%
5,000,000 - 10,000,000	72	2	2	100%
1,000,000 - 5,000,000	528	13	13	100%
500,000 - 1,000,000	622	17	15	88%
100,000 - 500,000	3,335	105	85	81%
50,000 - 100,000	2,712	95	59	62%
25,000 - 50,000	3,437	122	35	30%
10,000 - 25,000	8,226	246	65	26%
< $10,000	6,098	148	39	26%
Totals	25,094	753	318	

Sources: Michigan Foundation Directory (6th ed. 1988);

National Data Book (Vol. 13, 1989)

The date of incorporation or date of exemption for each of the initial sample of 318 Michigan foundations was checked with the records of the Department of Commerce - Corporation Division and the Attorney General's Office - Charitable Trust Division for the State of Michigan. The foundations that were not in existence for the entire sample period, 1976 to 1987, were eliminated as well as those that did not prepare a Form 990-PF for the year[2]. This step deleted 110 foundations, leaving 208 foundations in the final sample.

Microfiche copies of the annual tax returns [Form 990-PF] for some foundations for some of the twelve years in the sample period were not available in the Foundation Collection at the Michigan State University library. The collection at the University of Michigan and Wayne State University libraries were checked, the IRS was contacted to send duplicates to the MSU library, and finally the foundations themselves were asked to provide copies. There were only 72 missing returns out of 2,496 after this process (less than three percent missing) representing 55 of the 208 foundations in the final sample. Table 5.3 shows the final sample.

---

[2]For the early years some foundations prepared only a Form 990-AR. This form was required until 1980 (check this) in addition to the Form 990-PF but provides less detailed financial information. The financial information which is on the 990-AR is not comparable to the 990-PF.

Table 5.3

SAMPLE

Population:	U.S. independent, private, nonoperating foundations	25,094
Target Population:	Michigan independent, private, nonoperating foundations	753
Initial Sample:	All large foundations and 25% of the small foundations (FMV of assets or grants given < $1,000,000)	318
Less:	Foundations not in existence for the entire period 1976 to 1987; which did not prepare a Form 990-PF for each of those years; or which should have been classified as corporate foundations	110
Total:	FOUNDATIONS	208
Times	Total number of years in the sample	12
Total:	FOUNDATION/YEARS	2,496
Less:	Missing observation years (representing 55 foundations)	72
FINAL SAMPLE:	FOUNDATION/YEARS	2,424

5.3 Documentation of Empirical Regularities

5.3.1 Foundation Specific Characteristics

The past literature identified four characteristics that may be used to stratify and describe foundations to identify which foundations "behave" in a similar fashion. These characteristics are funding-type, size, age, and primary field of endeavor. These measures are generally described in Table 4.1.

The funding type for the twelve year period is defined in two ways. The ratio of contribution income to interest and dividend income is computed for each year. A label of "1" for "endowment-type" foundations is assigned to those with a ratio less than 1. "Flow-through" foundations are all others. Then, an average of the funding types (1 or 2) over the twelve year period is determined. The first definition of funding type identifies endowment-type foundations as those with average ratios less than or equal to 1.5. The stricter definition of funding type classifies those foundations with mean types less than 1 as "pure" endowment-type foundations.

Size is divided into eight categories corresponding to the reporting classifications used in annual reports of the Foundation Center based on 1987. This discrete stratification of foundations is preferred to continuous measurement for purposes of comparison to published studies, and it is expected that relative rankings of foundations will stay the same over the sample period.

Date of incorporation and date of exemption from income (by the IRS) are often within two years of each other. It is thought that a gross measure stratifying foundations into "old," "middle-aged," and "relatively

young" is sufficient. The two dates are available for many foundations on the 1975 Form 990-PF, the last time the IRS asked for that piece of information, or from the Department of Commerce, State of Michigan master file.

Primary field of endeavor or recipient donee-type is determined with reference to the most recent year, 1987. Foundations are dicotomized into one group that gives primarily to health and education charities, and another group that gives to all others, or gives to different fields of endeavor each year.[3]

Univariate descriptions of these three stratifying variables are presented in the form of frequencies, means and other moments, ranges, and percentile bar graphs. Univariate statistics for the decision variables, payout rates, rates of return on investment, and net worth, are presented alternatively by stratifying the sample by each of the descriptive characteristics. A Chi-square test is used to measure the degree of association between variables. Correlations of the stratifying and decision variables are provided using both parametric and nonparametric tests because the characteristics of the underlying population are not known.

Several measures of each of the variables are examined. Since this study is done in the early stages of the examination of foundation behavior and the reliability of measures is not known, the robustness of the results across alternative measures is examined. Figure 5 summarizes the measures of the descriptive and decision variables.

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[3]The variable "field of endeavor" is dropped from the discussion at this point because of measurement problems. See Chapter 6 for a discussion.

MEASURES OF THE DESCRIPTIVE AND DECISION VARIABLES

DESCRIPTIVE STRATIFYING VARIABLES:

Funding Type   1 = Endowment-type;   2 = Flow-through-type

    TYPE1   Mean of Contributions/Interest and Dividend Income < 1.5 for the sample period

    TYPE2   Mean of Contributions/Interest and Dividend Income < 1.0 for the sample period

Size   Fair market value of assets in 1987
                    Range 1 (smallest) to 8 (largest)

Age   1 = Pre-1950; 2 = 1950 - 1969; 3 = Post-1969

DECISION VARIABLES:

Payout Rate

PORATE1   <u>Qualifying Distributions</u>
              Two year Average of Net Investment Assets

PORATE2   <u>Qualifying Distributions</u>
              Net Investment Income

Return on Investment (continuous)

RETURN1   <u>Interest and Dividend Income</u>
              Fair Market Value of Total Assets

RETURN2   <u>End. FMV of Assets - Beg. FMV of Assets - Gifts + (Grants + Operating Expenses + Taxes)</u>
              Beg FMV of Assets + [Gifts/2]

RETURN3   {End FMV of Assets - Beg FMV of Assets - Gifts
              <u>+ (Grants + Operating Expenses + Taxes)</u>
                Beg FMV of Assets + [Gifts/2]}   / CPI

RETURN4   {End FMV of Assets - Beg FMV of Assets - Gifts
              <u>+ (Grants + Operating Expenses + Taxes)</u>
                Beg FMV of Assets + [Gifts/2]}   / GNP IPD

Net Worth (continuous)
    NW1   Net Worth (Assets - Liabilities)

    NW2   Net Worth (adjusted for inflation by the Consumer Price Index)

    NW3   Net Worth (adjusted for inflation by the Gross National Product Implicit Price Deflator)

Figure 5

The correlation of the three descriptive variables with the three decision variables is given using the measures that perform best. Pearson Product-Moment correlations, which assume normality of the underlying distribution, are computed as well as the nonparametric Spearman Rank correlations.

5.3.2   Pre- and Post-ERTA

The three "decision" variables, payout rates, return on investment, and net worth, are compared between two time periods. Paired comparison t-tests are used to determine if there is a significant difference between the two tax regimes with respect to these variables of interest. In particular, the analysis is performed separately for three groups of foundations stratified by the descriptive variables: funding-type, size, and age. Tests such as these simple comparisons of an "event of interest" between two tax regimes have been employed in studies on the impact of tax legislation [Scholes and Wolfson, 1990].

5.4   Statistical Procedures and Test of Models

After univariate tests describing the three descriptive and three decision variables are conducted, the correlation of these variables is examined. Tests of significance must be interpreted with caution, however, when samples are nonrandom or if the research is designed to develop and validate a theory [Henkel, 1976, p. 7]. Multivariate tests associating the descriptive variables with payouts are performed next.

5.4.1   Cross-Sectional Analysis

Cross-sectional regressions are run on the two models presented in Chapter Three: Model 1 is derived from the work of Reilly and Skadden and

Model 2 is inspired by Steuerle's normative model.

One regression is run on the entire sample of 2,424 foundation/year observations using ordinary least squares. The regressions are also run on each of the models after the sample has been stratified by size and age. Only those foundations meeting the strict definition of endowment-type foundations are included at this stage.

The criteria used for evaluation of the models includes examination of the adjusted R^2, the F statistic, and significance and sign on each of the explanatory variables. Each regression is also run with the inclusion of a dummy variable for tax regime (ERTA). The significance of the ERTA dummy, the significance of the F statistic, and the constancy of the sign and significance of each of the other explanatory variables is examined and compared to the regressions without the tax regime variable.

5.4.2   Longitudinal Analysis

The simple time series model is tested using regression. The entire sample is first examined and then the sample is stratified by size and age. Again, the criterion of goodness of fit of the models chosen is coefficient of determination (adjusted R^2). The parametric tests are performed and the Student's t statistic is reported.

Violations of OLS assumptions are considered in the longitudinal analysis. The residuals are plotted against the independent and dependent variables and time to look for distinct patterns of variation. For these reasons, OLS regression is inappropriate and weighted least squares, a method of generalized least squares regression, is used [Balestra & Nerlove, 1966, p. 608]. Both the right and left hand side variables in Model 4 are deflated by fair market value of assets.

5.4.3   Proposed Model and Panel Data Issues

The proposed model incorporates the descriptive variables (size and age), the decision variables (rate of return and net worth), a tax regime dummy variable, and most importantly, a variable identifying each foundation.   Inclusion of this variable allows the largest number of observations in the sample to be used, thereby efficiently using the panel data. Without this variable, inferences based on only twelve observations in a time series would be misleading.

Panel data has become more widely used in this decade because of its superior descriptive ability over aggregated data [Brannon, 1981, p. 440]. However, violations of the ordinary least squares (OLS) regression assumptions result because of the nature of the pooled cross section and time series data.   These violations include non-normalcy, heteroscedasticity, autocorrelation, and contemporaneous covariance in the error terms [Kmenta, 1986, p. 208].   In addition, the parameters of the data generating process may not be the same for all observations. Different foundations may react differently to changes in the independent variables.   Foundations may react differently over time. Inclusion of a unique identifying variable for each foundation addresses this problem.

This study is considered an initial attempt to build a longitudinal pattern of foundation variables from the smallest unit of time available (a year) and from the first date tax return data was available on microfiche (1975).   Years can be added to the panel data base and the ability to draw inferences should improve in the future.

Chapter Six

ANALYSIS OF RESULTS

This chapter presents the results of the tests conducted to examine characteristics of foundations and trends over time with respect to payout and investment decisions. Recall that documentation of the pattern of stratifying and decision variables across foundations and over time is done before models of the payout decision incorporating these explanatory variables are examined.

First, univariate statistics and correlations of the descriptive and decision variables are presented. Second, tests of the decision variables over two tax regimes, pre- and post-ERTA, are examined. Third, two models of payouts are examined cross-sectionally and a time series model is evaluated. Finally, the proposed model that takes advantage of the panel data is tested. Models are tested on the sample of endowment-type foundations, and then the sample is stratified by size and age.

6.1   Univariate Statistics

6.1.1   Frequencies and Means

The sample is fairly representative of the nationwide and Michigan population of independent private nonoperating foundations when measured by fair market value of assets. A graph of this relationship appears in Figure 6. The sample does include a higher percentage of the median-sized foundations than the Michigan or national population and less of the very small foundations. It can be seen that the distribution of foundation size is highly skewed to the right, illustrating, as reported in SOI

studies [1989, p. 27], that a small share of foundations (roughly 20%)
have the largest percentage of assets.

FOUNDATION SIZE (SAMPLE, MICH, NATION)
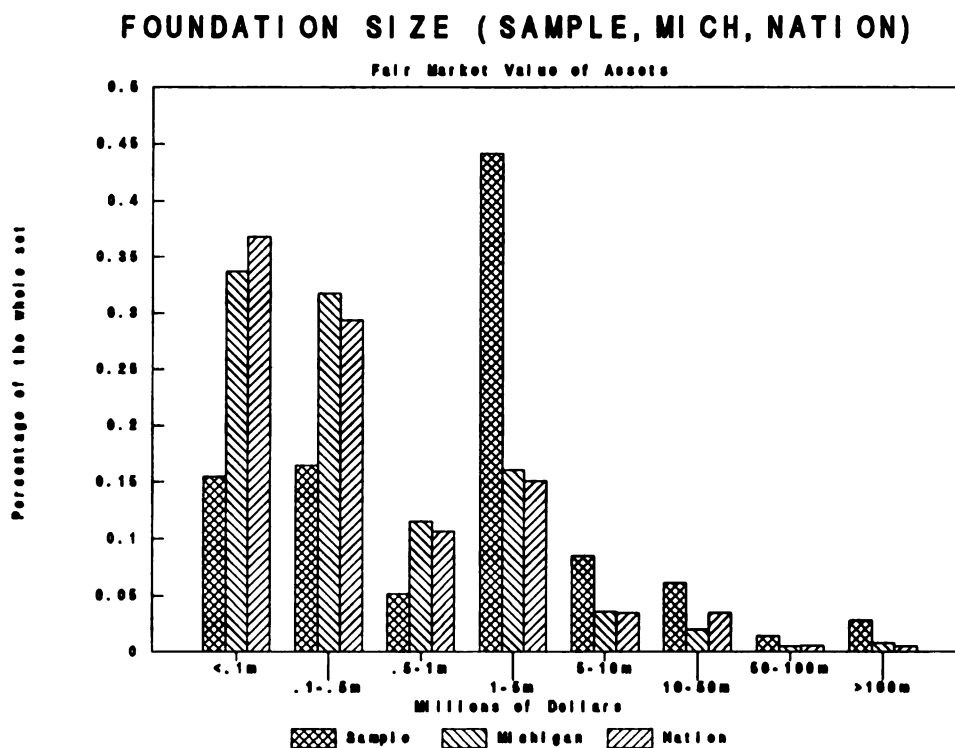
Figure 6

The four stratifying or descriptive variables (funding-type, size, age, and primary field of endeavor) are first examined individually.

Funding-Type   An initial classification of funding-type defines endowment-type foundations as those with a mean "type" less than or equal to 1.5.   That is, if a foundation is classified as a flow-through foundation (Type=2) based on the ratio of contribution income to interest and dividend income more often than an endowment-type foundation (Type=1) during the twelve year test period, then the foundation retains the label of flow-through foundation.   This method yields 29 flow-through and 179 endowment-type foundations.

Careful examination of the Kellogg Foundation suggests that although annual contributions far exceed the interest and dividends it earns on its assets (valued at approximately $207,000,000 in 1989), the contributions all come from the W. K. Kellogg Foundation Trust. The Kellogg Foundation Trust is required to distribute its net receipts to the Kellogg Foundation, its sole beneficiary, at least quarterly.

The Kellogg Trust holds assets valued at almost $4,000,000,000, comprised in large part of over 41,000,000 shares of Kellogg Company common stock.   Although annual audited financial statements and the Foundation Center report on the combined financial position and operations of the two entities, separate tax returns are prepared for each. The IRS in its SOI study [1989, p. 29] lists the W. K. Kellogg Foundation Trust as second only to the Ford Foundation (with assets valued at $4.7 billion), in a national ranking of nonoperating foundations by fair market value of assets. When nonoperating foundations were ranked by "amount of grants paid out" in 1985, the W. K. Kellogg Foundation Trust appears third

followed by the W. K. Kellogg Foundation. The dependent relationship between the two entities, as well as the relatively large size of the Kellogg Foundation with respect to the rest of the sample, suggests that this foundation be excluded from the analysis.

A more narrow definition of funding-type classifies foundations with mean "type" (ratio of contributions to interest and dividend income for the period) in excess of one as flow-through foundations. This classification yields 104 flow-through foundations and 103 endowment-type foundations. This definition segregates the "pure" endowment-type foundations, those which depend upon interest and dividend income to endow the foundation to ensure its growth and perpetuity.

Table 6.1 shows descriptive statistics, including means and standard deviations, for the two definitions of funding-type. Under both definitions of funding-type endowment-type foundations are larger and older than the flow-through foundations. The mean size, on a scale of 1 to 8, for endowment-type foundations is 3.61 (Definition 1) and 3.82 (Definition 2) versus 3.04 and 3.26 for flow-through foundations. The mean age, where 1 represents the oldest foundations and 3 represents the most recently formed foundations, is 1.93 and 1.86 for endowment-type foundations versus 2.25 and 2.08 for flow-through foundations.

Table 6.1

DESCRIPTIVE STATISTICS - FUNDING TYPE

PANEL A. Definition 1 (Mean "Type" <= 1.5)

FUNDING TYPE	Level		n SIZE Mean (Std.Dev.)	AGE Mean (Std.Dev.)
Endowment	1	179	3.61 (1.58)	1.93 (.59)
Flow-through	2	28	3.04 (1.84)	2.25 (.51)
Total		207		

PANEL B. Definition 2 (Mean "Type" <= 1.0)

FUNDING TYPE	Level		n SIZE Mean (Std.Dev.)	AGE Mean (Std.Dev.)
Endowment	1	103	3.82 (1.65)	1.86 (.59)
Flow-through	2	104	3.26 (1.56)	2.08 (.57)
Total		207		

The target of the minimum distribution legislation was the pure endowment-type foundations. This type of foundation could hoard the charitable contributions and defer the use of the funds by the intended beneficiaries, public charities. Table 6.2 highlights the problem when flow-through foundations are combined with endowment-type foundations. The mean payout rate for flow-through foundations is 248.32% compared to the average payout rate for endowment-type foundations of 8.77% when the broad definition of funding type is used.

The narrower definition of endowment-type foundations still shows a substantial difference between the mean payout rate for endowment-type foundations (6.47%) and the mean payout rate for flow-through foundations (76.14%). However, the variance of mean payout rate, as seen by the standard deviations in Table 6.2, are much smaller when the stricter definition of endowment-type foundations is used. The Chi-Square test shows that there is a significant difference between the two types of foundations with respect to payout rates.

Table 6.2

UNIVARIATE STATISTICS - PAYOUT RATE BY FUNDING-TYPE

PANEL A.   Payout Rate by Funding Type (Definition 1)

TYPE:	Level	n = fdn (fdn/yrs)	Mean % (Std.Dev.) 1976-1987
Endowment	1	179 (1,980)	8.77 (14.46)
Flow-through	2	28 (314)	248.32 (929.65)
Total		207 (2,294)	
F-statistic (p)			278.36 (.0001)

PANEL B.   Payout Rate by Funding Type (Definition 2)

TYPE:	Level	n = fdn (fdn/yrs)	Mean % (Std.Dev.) 1976-1987
Endowment	1	103 (1,140)	6.47 (5.35)
Flow-through	2	104 (1,154)	76.14 (496.00)
Total		207 (2,294)	
F-statistic (p)			317.42 (.0001)

Univariate statistics on the entire sample of 207 foundations are now presented stratified by size and age. Field of endeavor is also discussed as a descriptive variable.

Size and Age

Table 6.3 (Panel A) reports the mean age by size and the mean size by age (Panel B) for the sample. The sample consists primarily of foundations with assets valued between $1,000,000 and $5,000,000, which were incorporated between 1950 and 1969.

Table 6.3

DESCRIPTIVE STATISTICS - SIZE AND AGE

PANEL A. Stratified by Size

SIZE	Level	n	AGE Mean (Std.Dev.)
> $ 100,000,000	8	5	1.20 (.40)
50,000,000 - 100,000,000	7	3	1.33 (.48)
10,000,000 - 50,000,000	6	13	1.46 (.64)
5,000,000 - 10,000,000	5	18	1.83 (.50)
1,000,000 - 5,000,000	4	93	1.90 (.57)
500,000 - 1,000,000	3	11	2.09 (.29)
100,000 - 500,000	2	34	2.29 (.52)
< $100,000	1	30	2.27 (.44)
Total		207	

PANEL B. Stratified by Age

AGE	Level	n	SIZE Mean (Std.Dev.)
Pre-1950	1	39	5.03 (1.44)
1950 - 1969	2	135	3.32 (1.46)
Post-1969	3	33	2.67 (1.39)
Total		207	

Field of Endeavor

Insufficient data were collected on the variable "primary field of endeavor" or recipient donee-type to include this as a stratifying characteristic of foundations. Forty-two of the 208 foundations responded to a survey requesting a breakdown categorizing their grant recipients by field of endeavor (see Appendix C for the survey instrument). Several foundations sent annual reports for the twelve years rather than classify their giving.

It was expected that if foundations do associate themselves with a few primary causes that remain constant over time, then the response to the survey would be high. The low response and accompanying comments by the foundation representatives indicate that many foundations vary their gifts each year. Schedules attached to each year's Form 990-PF and annual financial reports of foundations do list grant recipients. However, it is thought that an intolerable amount of measurement error would be introduced by my subjectively classifying donees based solely on their name. Consequently, classification of foundation by donee-type, such as "educational sponsors" or "cultural sponsors," is deemed inappropriate. This descriptive variable is omitted from the analysis.

6.1.2   Correlations   The Pearson product-moment correlations and Spearman Rank correlations of the three descriptive variables and three decision variables for the entire sample are presented in Table 6.4. The narrow definition of funding-type is used, payout rates (PORATE1) are the ratio of qualifying distributions to net investment assets, and rates of return (RETURN3) and net worth (NW2) are adjusted for inflation using the Consumer Price Index.

Table 6.4

CORRELATIONS BETWEEN DESCRIPTIVE AND DECISION VARIABLES
(one-tailed probabilities)

PANEL A.　　Pearson Product-Moment Correlations

	TYPE	SIZE	AGE	PAYOUT RATE	RATE OF RETURN	NW
TYPE n=2484	1.000 (.0000)					
SIZE n=2484	-.1704 (.0001)	1.000 (.0000)				
AGE n=2484	.1807 (.0001)	-.4368 (.0001)	1.000 (.0000)			
PAYOUT n=2294	.0986 (.0001)	-.0188 (.3684)	.0744 (.0004)	1.000 (.0000)		
RETURN n=2344	-.0115 (.5777)	.0099 (.6294)	.0001 (.9959)	-.0039 (.8517)	1.000 (.0000)	
NW n=2399	-.0872 (.0001)	.2855 (.0001)	-.1602 (.0001)	-.0119 (.5684)	.0064 (.7575)	1.000 (.0000)

PANEL B.　　Spearman Correlations

	TYPE	SIZE	AGE	PAYOUT RATE	RATE OF RETURN	NW
TYPE n=2484	1.000 (.0000)					
SIZE n=2484	-.1489 (.0001)	1.000 (.0000)				
AGE n=2484	.1811 (.0001)	-.4227 (.0001)	1.000 (.0000)			
PAYOUT n=2294	.2867 (.0001)	-.1563 (.0001)	.0874 (.0001)	1.000 (.0000)		
RETURN n=2344	-.0664 (.0013)	.0529 (.0105)	-.6489 (.0017)	.0446 (.0330)	1.000 (.0000)	
NW n=2399	-.2386 (.0001)	.8165 (.0001)	-.3985 (.0001)	-.2027 (.0001)	.1458 (.0001)	1.000 (.0000)

As expected, the three descriptive variables (funding-type, size, and age) are significantly correlated with each other. The small number of levels of each variable contributes to the correlation. A profile of the sample, based on the correlations of the descriptive variables, is intuitively appealing. Older foundations are more likely to be large and funded by endowments. The flow-though foundations were established more recently than the endowment foundations and, quite naturally, have smaller asset bases. This result appears whether Pearson Product-Moment or the non-parametric Spearman Rank Correlations are used.

The three decision variables (payout rate, rate of return, and net worth) are not significantly correlated with each other using the Pearson Product-Moment correlations; however, they are significantly correlated when the Spearman Rank correlations are examined. This result is reasonable because there is strong evidence that the underlying population is not normally distributed. When measured by fair market value of assets, Figure 6 showed that the sample and population are skewed to the right. The finding that the decision variables are correlated is appealing. Results of investment decisions, such as rate of return and net worth, are expected to be related to spending decisions such as payout rates.

As expected, as rate of return increases, so does the net worth of the foundation. As the net worth of the foundation grows, the payout rate decreases. If net worth is viewed as a proxy for size, then this result is consistent with the Salamon and Voytek study [1989] which indicates that larger foundations conserve their asset bases in order to grow and perpetuate and consequently, they pay out the least amount required by

law. Finally, as the rate of return increases, so does the payout rate. These results are not sensitive to the alternative measures of rate of return and net worth.

The Spearman Rank correlations indicate a significant correlation in the hypothesized direction among all nine correlations of the descriptive and decision variables. Mixed results are found with the Pearson Product-Moment correlations again suggesting that normality is not a valid assumption with the population under consideration. Higher payout rates are associated with flow-through foundations, smaller foundations, and newer foundations. This result is reasonable because flow-through foundations, with very small asset bases, will have a small denominator in the payout ratio. Salamon and Voytek [1989] also found that smaller foundations, as measured by fair market value of assets, pay out relatively more than large foundations. It is intuitive that the older foundations have been in existence because of payout policies that allowed them to minimize payouts contributing to growth and perpetuity.

A significant negative relationship between rate of return and funding-type indicates that endowment-type foundations earn a higher rate on their investments. This result is reasonable since the endowment-type foundations are in the business of managing a portfolio of assets; flow-through foundations do not have the asset bases to require staff or expertise in this area. Correlations also indicate that higher rates of return are earned by the larger and older foundations reflective of solid investment policies that have survived over time.

Higher levels of net worth, adjusted for inflation, are achieved by larger, older, endowment-type foundations. The remaining analysis of the

sample is dicotomized by the second, more narrow, definition of funding-type. This definition is believed to provide more insight into the kind of nonoperating foundation which Congress sought to constrain.

6.1.3   Cross-Frequencies

Univariate statistics for each of the decision variables, payout rates (see Table 6.5), rates of return (see Table 6.6), and net worth (see Table 6.7) are given in the next three tables for the 103 pure endowment-type foundations.   The mean and standard deviation of each decision variable is presented stratified by size and age. Three time periods are presented: the twelve year sample period, the six years before the ERTA of 1981 and the post-ERTA period.   Panel A reflects size and Panel B reports on age.   The cross-frequencies of the decision variables with the descriptive variables are evaluated with the Chi-square test to measure the association for the whole sample period.

Payout Rate

The results of a Chi-square test of cross-frequencies, presented in Table 6.5, show that there is a significant difference in average payout rates depending upon the size and age of the foundation. Payout rates are measured using the first definition: qualifying distributions/average net investment assets.   The results, however, are insensitive to either measure of payout rate. The highly significant F statistics indicate that the descriptive variables are well chosen for stratifying the sample.

Table 6.5

UNIVARIATE STATISTICS - PAYOUT RATE BY SIZE AND AGE

PANEL A.   Average Payout Rate by Size (Fair market value of assets)

SIZE	Le-vel	n = fdn/yrs	Mean % (Std.Dev.) 1976-1987	Mean % (Std.Dev.) PRE-ERTA	Mean % (Std.Dev.) POST-ERTA
> $100,000,000	8	39	5.77 (1.90)	5.79 (2.14)	5.75 (1.65)
50,000,000 - 100,000,000	7	22	4.78 (1.75)	4.65 (1.79)	4.89 (1.78)
10,000,000 - 50,000,000	6	79	6.13 (5.92)	6.02 (5.82)	6.24 (6.08)
5,000,000 - 10,000,000	5	90	6.35 (2.86)	6.08 (2.89)	6.60 (2.84)
1,000,000 - 5,000,000	4	573	6.12 (2.75)	6.31 (3.08)	5.94 (2.37)
500,000 - 1,000,000	3	67	6.36 (2.06)	6.20 (2.29)	6.53 (1.79)
100,000 - 500,000	2	169	6.52 (4.70)	5.87 (3.86)	7.14 (5.33)
< $100,000	1	101	9.49 (13.97)	7.29 (6.22)	11.57 (18.36)

F-statistic 282.37; p < .0001

PANEL B.   Average Payout Rate by Age

AGE	Le-vel	n = fdn/yrs	Mean % (Std.Dev.) 1976 - 1987	Mean % (Std.Dev.) PRE-ERTA	Mean % (Std.Dev.) POST-ERTA
Pre-1950	1	276	6.13 (3.23)	6.14 (3.51)	6.12 (2.94)
1950 - 1969	2	737	6.54 (6.16)	6.26 (3.79)	6.81 (7.79)
Post-1969	3	127	6.83 (3.72)	6.29 (3.73)	7.38 (3.66)

F-statistic 25.36 p < .188

Small foundations (Size 1 through size 4) are found to pay out higher rates on average in all three periods (7.12%, 6.42%, 7.80%) than larger foundations (5.76%, 5.64%, 5.87%) as hypothesized and as Salamon and Voytek report [1989]. It was hypothesized that payout rate would decrease in the post-ERTA tax regime. That is, foundations with a growth policy of "growth and perpetuity" are expected to distribute only that which the law requires. Foundations with adjusted net income exceeding five percent of net investment assets would find that the relaxation of the minimum distribution rules in 1981 allowed lower required payout rates.

The very large foundations, those with asset bases valued between $1,000,000 and $5,000,000, and the oldest foundations do show a lower payout rate in the post-ERTA period. However, for all the other foundations, payout rates are higher in the post-ERTA tax regime than in the years before 1982. This result is opposite that which was hypothesized. The significance of this relationship between periods is examined in Table 6.8 with a t-test of paired means.

Rate of Return

The rate of return for pure endowment foundations is examined next in Table 6.6. The sample is again stratified by size and age. The rate of return measure is the unit method of measuring the ratio of the flow of assets into the foundation by the average investment assets using the Consumer Price Index to adjust for inflation (RETURN3).

Table 6.6

UNIVARIATE STATISTICS - RATE OF RETURN BY SIZE AND AGE

PANEL A.   Rate of Return by Size (Fair market value of assets)

SIZE	Le-vel	n = fdn/yrs	Mean % (Std.Dev.) 1976-1987	Mean % (Std.Dev.) PRE-ERTA	Mean % (Std.Dev.) POST-ERTA
> $100,000,000	8	44	25.34 (178.80)	-17.14 (30.36)	71.86 (251.74)
50,000,000 - 100,000,000	7	32	7.52 (33.82)	-9.12 (36.07)	27.21 (24.27)
10,000,000 - 50,000,000	6	80	13.23 (83.51)	1.72 (110.93)	23.64 (45.82)
5,000,000 - 10,000,000	5	89	4.78 (31.71)	-3.20 (38.76)	12.57 (20.42)
1,000,000 - 5,000,000	4	572	4.61 (42.17)	-4.64 (56.55)	13.53 (15.84)
500,000 - 1,000,000	3	67	5.19 (33.71)	.62 (45.02)	10.20 (12.08)
100,000 - 500,000	2	170	5.03 (34.66)	-2.00 (42.65)	11.73 (23.09)
< 100,000	1	107	15.57 (169.92)	28.10 (243.25)	3.72 (22.31)

F-statistic 92.14; p < .039

PANEL B.   Rate of Return by Age

AGE	Le-vel	n = fdn/yrs	Mean (S.D.) 1976 - 1987	Mean (S.D.) PRE-ERTA	Mean (S.D.) POST-ERTA
Pre-1950	1	291	9.10 (83.99)	-6.18 (62.56)	23.66 (98.27)
1950 - 1969	2	743	7.34 (76.42)	2.15 (106.82)	12.35 (20.59)
Post-1969	3	127	1.91 (20.02)	-7.79 (21.50)	11.77 (12.18)

F-statistic 10.136; p < .966

It was hypothesized that the rate of return for foundations would increase after the ERTA of 1981. That is, if investment strategies were modified, recognizing the removal of the requirement to pay out all of a foundation's net income, then foundation managers would seize the opportunity to invest in higher risk investments that would deliver a higher rate of return.

The Chi-square test, again, shows that size significantly discriminates among foundations with respect to rate of return. The F-statistic in Table 6.6 for Panel B, however, indicates that the difference between mean rate of return for each of the three levels of age is not significant.

The unit method rate of return measure, adjusted for inflation, does show that rates of return are higher in the post-ERTA period for all but the smallest foundations. In addition, all age categories of foundations show higher rates of return after 1981 as hypothesized.

Results are mixed across the size categories of foundations when the first measure of rate of return, unadjusted for inflation, is used. It is likely that the high inflation years of 1979, 1980, and 1981 in the pre-ERTA period are the cause of high nominal returns for all investors in securities and consequently, the relatively high mean rates of return in the Pre-ERTA period reflect this. For that reason, Table 6.6 reports on the most appropriate measure of return, the unit method, adjusted for inflation. Results are not sensitive to the use of Consumer Price Index or Gross National Product Implicit Price Deflator as an adjustment for inflation.

<u>Net Worth</u>   In the this section, net worth is examined in the same manner as payout rates and rate of return. It was expected that, like rate of return, net worth would increase in the post-ERTA era. That is, if rates of distribution decrease and rates of return on investment increase, the result of those spending and investment decisions by the foundation managers would be a growth in the foundation. Net worth is the accounting concept that measures the net endowment that exists in the foundation: assets less liabilities. Table 6.7 shows the mean level of net worth for the entire twelve year period, as well as before and after 1981, adjusting for the effects of inflation.

Table 6.7

UNIVARIATE STATISTICS - NET WORTH BY SIZE AND AGE

PANEL A.   Net Worth (in dollars) by Size (Fair market value of assets)

SIZE	Le-vel	n=fdn/yrs	Mean ($)(Std.Dev.)1976-1987	Mean ($)(Std.Dev.)PRE-ERTA	Mean ($)(Std.Dev.)POST-ERTA
> $100,000,000	8	40	239,661,109(290,002,341)	229,694,472(244,573,347)	251,842,555(344,618,978)
50,000,000 -100,000,000	7	33	21,262,833(14,131,260)	18,305,916(11,954,732)	23,726,931(15,622,192)
10,000,000 -50,000,000	6	82	9,893,779(5,930,090)	7,585,089(4,125,368)	12,092,532(6,567,592)
5,000,000 -10,000,000	5	92	4,474,505(6,584,692)	3,245,671(2,129,810)	5,703,340(8,947,434)
1,000,000 -5,000,000	4	585	1,302,816(828,625)	1,084,423(675,136)	1,517,507(906,942)
500,000 -1,000,000	3	70	447,479(129,210)	386,189(101,004)	512,375(125,105)
100,000 -500,000	2	174	182,694(100,942)	176,909(102,429)	188,347(99,729)
< $100,000	1	112	49,114(49,293)	51,690(52,861)	46,629(45,923)

PANEL B.   Net Worth (in dollars) by Age

AGE	Le-vel	n=fdn/yrs	Mean(Std.Dev.)1976 - 1987	Mean(Std.Dev.)PRE-ERTA	Mean(Std.Dev.)POST-ERTA
Pre-1950	1	294	37,405,244(133,144,392)	38,235,689(123,505,362)	36,586,022(142,431,949)
1950-1969	2	760	1,625,318(3,473,851)	1,320,702(2,350,042)	1,925,162(4,284,816)
Post-1969	3	134	816,710(852,079)	697,000(673,741)	936,420(989,978)

The Chi-square test to measure the significance of the cross-frequencies of net worth with size and age are not valid because there are often less than five observations in a cell. That is, there are so many categories of net worth, as measured in dollars, that the test is not appropriate.

However, the changes in net worth, adjusted for inflation, across two tax regimes and stratified by size and age do show support for the hypothesis that net worth is higher in the post-ERTA tax regime than before 1981. The exceptions are the oldest and very smallest foundations. Tests for the significance of this difference are reported in the next section. Results are robust across all three measures of net worth.

6.2   Pre- and Post-ERTA Paired Comparisons

The three decision variables, payout rate, rate of return, and net worth, are compared in two tax regimes: pre- and post-ERTA. Differences between the mean post-ERTA value and mean pre-ERTA value for each of the three variables are computed for the 103 pure endowment-type foundations. Table 6.8 shows the mean differences with related t-statistics and probabilities to test the null hypothesis that there is no difference between the two tax regimes.

The tests are performed for the full sample, followed by the sample stratified by size and then age. The first measure of payout rate is used, qualifying distributions/average net investment assets; the unit measure of rate of return adjusted for inflation by the Consumer Price Index (RETURN3), and the measure of net worth is also adjusted for inflation using the Consumer Price Index (NW2).

Table 6.8

T-TESTS OF PAIRED COMPARISONS
DIFF = (POST-ERTA) - (PRE-ERTA)

	PAYOUT RATE (%) DIFF	t (p<)	RATE OF RETURN (%) DIFF	t (p<)	NET WORTH ($) DIFF	t (p<)
All Endowment Foundations	7.3410	.71 (.4771)	14.13	2.28 (.0248)	5,683,576	1.60 (.1116)
SIZE 8	-39.29	-1.00 (.3276)	80.63	1.57 (.2138)	124,318,445	1.60 (.2086)
SIZE 7	2.26	1.31 (.2075)	31.86	1.92 (.1955)	5,421,015	2.64 (.1188)
SIZE 6	-1.52	-0.45 (.6586)	25.01	1.29 (.2460)	4,429,059	2.22 (.0680)
SIZE 5	10.97	1.01 (.3170)	15.32	2.03 (.0825)	2,368,598	2.04 (.0809)
SIZE 4	25.47	1.06 (.2931)	18.57	5.92 (.0001)	419,920	8.23 (.0001)
SIZE 3	.	.	9.31	1.25 (.2665)	129,274	8.02 (.0005)
SIZE 2	.	.	14.79	3.00 (.0095)	14,759	1.43 (.1746)
SIZE 1	-8.66	-0.86 (.4312)	-46.65	-.86 (.4109)	-7,374	-1.01 (.3387)
Pre-1950	10.022	.46 (.6456)	29.63	3.05 (.0054)	21,007,811	1.52 (.1400)
1950-1969	5.115	.78 (.4346)	6.83	.76 (.4473)	555,690	3.32 (.0015)
Post-1969	5.849	1.80 (.1323)	20.10	7.46 (.0001)	257,111	2.74 (.0194)

. not enough pairs of observations for the statistical test

The results of the paired comparison test shown in Table 6.8 indicate that the rates of return are significantly higher in the post-ERTA period than in the pre-ERTA period for the sub-sample of endowment-type foundations. Net worth is almost significant ($p < .1116$). However, there is no significant difference between payout rates in the pre- and post-ERTA tax regimes no matter how the sample is stratified.

This result for payout rates is not as hypothesized, although it agrees with the univariate results from Table 6.2. In fact, payout rates are higher in the post-ERTA period, although not significantly so.

6.3 Cross-sectional analysis

Two models that describe payout rate as a function of some explanatory variables are first tested on the whole sample of pure endowment-type foundations. This method takes advantage of the most observations ($n = 1236$ foundation/years). Panel A of Table 6.9 shows the results of the regressions on the sub-sample of endowment-type foundations. Panel B reports on the sub-sample stratified by size, and Panel C by age.

Table 6.9
CROSS-SECTIONAL REGRESSION MODELS
Coefficient (t-statistic)

PANEL A: Whole Sample

Model 1: $PO_t = B_0 + B_1\ ANI + B_2\ MIR + \epsilon_t$ (n = 1161)

Intercept	ANI	MIR	F (p<)	Adj. R^2
42,629 (1.676)*	.1647 (16.434)***	.8786 (82.194)***	14,381.72 (.0001)	.9612

Model 2: $PO_t = B_0 + B_1\ PO_{t-1} + B_2\ A_t + \epsilon_t$ (n = 1131)

Intercept	PO_{t-1}	A	F (p<)	Adj. R^2
25,250.25 (.811)	.2455 (14.397)***	.0386 (38.97)***	6,460.18 (.0001)	.9196

*** significant at .01
** significant at .05
* significant at .10

Table 6.9 (cont'd.)

PANEL B. Stratified by Size:

Model 1: $PO_t = B_0 + B_1 \, ANI + B_2 \, MIR + \epsilon_t$

	Intercept	ANI	MIR	F (p<)	Adj. R^2
Small n=931	9702.83 (6.233)***	.4273 (19.253)***	.5172 (16.406)***	1482.57 (.0001)	.7611
Large n=230	211888. (1.538)	.1617 (7.140)***	.8744 (36.071)***	2449.30 (.0001)	.9553

Model 2: $PO_t = B_0 + B_1 \, PO_{t-1} + B_2 \, A_t + \epsilon_t$

	Intercept	PO_{t-1}	A	F (p<)	Adj. R^2
Small n=906	5557.97 (3.417)***	.2880 (13.60)***	.0368 (25.394)***	1396.86 (.0001)	.7552
Large n=225	114416. (.681)	.2433 (6.306)***	.0384 (17.197)***	1107.25 (.0001)	.9081

*** significant at .01
** significant at .05
* significant at .10

Table 6.9 (cont'd.)

PANEL C. Stratified by Age

Model 1: $PO_t = B_0 + B_1 ANI + B_2 MIR + \epsilon_t$

	Intercept	ANI	MIR	F (p<)	Adj. R²
Age 1 n=287	137109. (1.282)	.1629 (8.072)***	.8764 (40.641)***	3258.84 (.0001)	.9580
Age 2 n=741	1782.78 (.313)	.2680 (11.454)***	.8912 (43.847)***	2749.56 (.0001)	.8814
Age 3 n=133	7494.9 (3.012)***	.2548 (5.672)***	.7494 (13.643)***	396.56 (.0001)	.8570

Model 2: $PO_t = B_0 + B_1 PO_{t-1} + B_2 A_t + \epsilon_t$

	Intercept	PO_{t-1}	A	F (p<)	Adj. R²
Age 1 n=271	99641.49 (.741)	.2476 (7.020)***	.0383 (18.773)***	1429.95 (.0001)	.9137
Age 2 n=733	19215.22 (2.984)***	.1245 (8.224)***	.0402 (34.049)***	1395.40 (.0001)	.7921
Age 3 n=127	6415.22 (2.274)**	.3543 (4.101)***	.0309 (6.798)***	332.31 (.0001)	.8402

*** significant at .01
** significant at .05
* significant at .10

All three panels of Table 6.9 shows that Model 1, which uses the variables from the Reilly and Skadden study, and Model 2, which uses the variables from the Steuerle paper, explain a significantly large portion of the variance in payouts for the sample. The range of adjusted R^2 is .7552 to .9612. The measure of payouts used in these two models is the actual level of payout, qualifying distributions. No matter how the sample is stratified, the two models both indicate that the explanatory variables, adjusted net income, minimum investment return, payouts from previous years, and fair market value of assets at the beginning of the year are all significant positive determinants of the current year's distributions.

Payouts, then, are not random across firms. Minimum distribution tax law provisions that incorporate the variables adjusted net income and minimum investment return can be expected to impact the payouts of endowment type foundations. However, when a dummy variable for the tax regime is added to the models as an explanatory variable, it is only significant for the middle-aged foundations under both models. As seen in the t-test of paired means in Table 6.8, it appears that the pre- and post-ERTA periods are not significantly different from each other.

6.4 Longitudinal Analysis

The time series model is tested for the whole sample (see Table 6.10). The regression is run for the whole sub-sample of endowment-type foundations, and then for the sample stratified by large and small foundations and for age. Advantage is taken of the panel data and an indicator variable (ID) identifying each foundation is included in the

model. Both the dependent and independent variable are weighted by size (fair market value of assets) to control for the correlation of the error term that is expected with time series data.

Table 6.10
LONGITUDINAL REGRESSION MODEL

Coefficient (t-statistic)

$$PO_t/FMV \text{ of Assets} = B_0 + B_1 \, PO_{t-1}/FMV \text{ of Assets} + B_2 \, ID + B_3 \, ERTA + \epsilon_t$$

	n = fdn/yrs	Intercept	PO_{t-1}	ID	ERTA	F (p <)	Adj. R2
Whole	1130	-.0068 (-.610)***	.2535 (12.759)***	.00005 (5.168)***	.0023 (.578)	69.872 (.0001)	.1547
Small	905	-.0163 (-1.133)	.2174 (9.636)***	.00006 (4.967)***	.0015 (.337)	43.953 (.0001)	.1248
Large	225	-.0322 (-.802)	.4629 (12.354)***	.00006 (1.561)	.00007 (.012)	54.470 (.0001)	.4173
Age 1	271	.0244 (1.134)	.4176 (12.602)***	.00001 (.466)	-.0007 (-.134)	54.951 (.0001)	.3748
Age 2	732	-.01919 (-1.205)	.2258 (9.055)***	.00006 (4.675)***	.00215 (.386)	38.972 (.0001)	.1348
Age 3	127	.01502 (.633)	.0450 (.482)	.00004 (2.141)**	.00344 (.477)	1.859 (.1384)	.0200

*** significant at .01
** significant at .05
* significant at .10

For all strata of the endowment-type foundations, except for the newest, this time series model shown in Table 6.10 is significant. Adjusted R^2s range from .13 to .41. The results, also for all stratifications of the endowment-type foundations, indicate that the previous year's payouts significantly contribute to the explanation of the variance of payouts over time.

The indicator variable for each foundation, ID, is significant for all but the largest and oldest foundations. This result, along with the low levels of the coefficient of determination, can be interpreted in this way: there are other foundation specific explanatory variables that contribute to the variance in payouts over time. It is appealing, though, that the large and old endowment-type foundations, presumably the target for minimum distribution regulation, do not show significant indicator variables. It may be that these foundations are homogeneous and stable in nature and it is the newer, smaller foundations which have much variance in their spending practices.

6.5 Proposed Model

The results of the proposed model regressing payout rates on size, age, rate of return, new worth, indicator variable for each foundation, and tax regime are presented next in Table 6.11.

Table 6.11
PROPOSED REGRESSION MODEL

$$PORATE_{it} = B_0 + B_{1it} SIZE + B_{2it} AGE + B_{3it} RETURN + B_{4it} NW + B_{5it} ID + B_{6it} ERTA + \epsilon_{it}$$

Panel A. Whole Sample (n = 1134)

Intercept	SIZE	AGE	RETURN	NW	ID	ERTA	F (p <)	Adj. R²
13.15 (5.342)***	-0.80 (-3.858)***	-0.16 (-0.539)	.004 (2.000)**	.0000 (.757)	-0.003 (-1.932)*	-0.380 (-1.200)	4.715 (.0001)	.0193

Panel B. Stratified By Size

	Intercept	AGE	RETURN	NW	ID	ERTA	F (p <)	Adj. R²
Small n=909	7.965 (4.246)***	.2877 (.828)	.0012 (.459)	.0000 (-2.417)**	-.0008 (-.578)	-.7334 (-1.913)*	2.387 (.0362)	.0076
Large n=225	-1.868 (-0.535)	-.554 (-1.077)	.0229 (4.947)***	-.0000 (-.416)	.0093 (2.511)**	.3157 (.620)	8.276 (.0001)	.1397

Panel C. Stratified by Age

	Intercept	SIZE	RETURN	NW	ID	ERTA	F (p <)	Adj. R²
Age 1 n=271	2.639 (.979)	.1033 (.590)	.0259 (7.028)***	-.0000 (-.885)	.0026 (1.274)	.5732 (1.555)	11.274 (.0001)	.1598
Age 2 n=736	22.207 (6.113)***	-1.861 (-5.272)***	.0010 (.359)	.0000 (1.411)	-.0081 (-3.592)***	-.4515 (-1.006)	6.664 (.0001)	.0371
Age 3 n=127	31.760 (3.803)***	-1.400 (-1.715)*	.0500 (2.861)**	-.0000 (-3.546)***	-.0154 (-3.050)***	-.8479 (-1.165)	5.592 (.0001)	.1541

*** significant at .01;   ** significant at .05;   * significant at .10

The proposed model of payouts is significant at every strata of the sub-sample of endowment-type foundations except the largest. The adjusted R^2s range from .0076 to .1598. This criteria implies that there is not much explanatory power in this model although it is significant. The explanatory variables that are reported as significant are size and rate of return. However, size is not significant for the oldest foundations, and rate of return is not significant for the smallest foundations formed between 1950 and 1969. The positive sign on the rate of return coefficient indicates that as the foundation grows and earns more, it will increase its level of distributions.

Consistent with the other tests in the current study, the dummy variable ERTA is not significant. Age is not significant and net worth is only significant for the smallest and newest foundations. An important finding, though, is that the variable identifying each foundation (ID) is significant. This variable is significant for all but the smallest and oldest foundations. Inclusion of this variable allowed the most observations to be included in the regression and takes advantage of the panel data. There appears to be foundation specific variables, other than those in the model, which will contribute to the explanation of the variance of payout rates across foundations and over time.

Chapter Seven

CONCLUSIONS AND IMPLICATIONS

Summary   The purpose of this study is to document empirically payout rates, rates of return, net worth, and related foundation-specific characteristics across foundations and over time. In addition, models of the foundation payout decision process are tested in order to determine which foundations make similar economic decisions under different tax regimes. This investigation is an initial step in understanding the role of foundations and behavior of foundation managers in the emerging "theory of the nonprofit sector."

Results confirm that funding-type, size, and age are descriptive variables which can distinguish foundations. Funding-type, in particular, is a critical stratifying variable.   Inclusion of flow-through foundations, with average payout rates over ten times higher than endowment-type foundations, leads to unclear conclusions about the impact of tax law provisions designed to affect endowment-type foundations.

Patterns of payout rates across foundations and over time lead to the comforting conclusion that spending decisions are not random. Small foundations are found to pay out higher rates than large foundations as hypothesized. Mean payout rates for most classifications of foundations, though, are not significantly different in the post-ERTA tax regime. It was expected that foundations with the objective of "growth and perpetuity" would lower their payout rates as the law was relaxed. This result suggests that further research be conducted incorporating explicit measures of a foundation's growth policy and alternative measures of

payout rates on a national sample of foundations.

The average rate of return and net worth are significantly higher in the years after 1981, as hypothesized, for most categories of foundations. This result suggests that Congress' objective of reversing the detrimental effects of the restrictive minimum distribution rules in the TRA of 1969 on private foundations was achieved. Foundations appear to be earning higher rates of return, possibly from more diversified portfolios, and accumulating significantly higher endowments thus realizing a policy of "growth and perpetuity."

The cross-sectional models all show significant ability to explain the variance in level of payouts across foundations no matter which way the sample is stratified. The following variables significantly contribute to the explanation of the difference in foundation payouts: adjusted net income, minimum investment return, previous year's payouts, and fair market value of assets. The time series regressions all show that the previous year's payout level is also a good indication of the payout for the current year. However, the dummy variable for tax regime is not significant. There is mixed evidence as to the difference between the pre- and post-ERTA tax regime.

. The proposed model, which incorporates a variable identifying each foundation as a unit, takes advantage of the panel data. This model also shows a significant ability to explain the variation in payout rates across foundations and over time. Only size and rate of return are significant explanatory variables. Age, net worth, and tax regime do not significantly distinguish among foundations. An important result is that the identifier for each specific foundation is significant in the proposed

model. This result, coupled with the lower adjusted R^2, indicates that in addition to size and rate of return there are foundation specific characteristics that contribute to the variance of payout rates among foundations. Further research can be designed to investigate other variables which may distinguish foundations.

<u>Relevance</u>   Despite multidisciplinary research efforts by newly formed centers for nonprofit studies at Yale, Case-Western Reserve, and Indiana Universities and annual "Third Sector" research forums sponsored by the Independent Sector, specific investigation of the foundation institution is still sparse. At a time when Congress has stepped up investigation of unrelated business income (UBIT) and excess administrative expenses of nonprofit entities, it is timely that the unique role of foundations as administrative intermediaries between donors and public charities is scrutinized.

<u>Limitations</u>   This project covers only active independent private nonoperating foundations. Investigation of corporate, community, and operating foundations is deferred. Only "surviving" foundations are examined, those which were in existence for the entire period (1976 to 1987). Investigation of foundations which terminated during that period may also shed light on the impact of the minimum distribution rules of the TRA of 1969. In addition, the focus on pure endowment-type foundations leaves interesting work in understanding the nature of flow-through foundations.

Only the excise tax for failure to distribute the required amount [IRC §4942] is examined. Other regulatory excise taxes on prohibited transactions by private foundations are not investigated in this study.

Further, twelve years is not a long time series. However, this panel data provides the initial baseline upon which future tax year information can be incorporated and results analyzed over time.

Contributions   This empirical study provides a framework to continue investigation into the manner in which foundation managers make financial economic decisions in response to changing tax laws. Use of publicly available tax return information complements the studies done by sociologists, political scientists, anthropologists, lawyers, and economists. In addition, the accounting researcher's familiarity with the tax legislative process, filing, and auditing of tax returns provides another perspective to the few social science studies on private foundations.

A public policy implication of this study is that the effectiveness of a tax law change designed to affect a certain segment of a population, such as endowment-type foundations, can only be assessed when data distinguishes the population by that characteristic. Annual statistics compiled by organizations serving the foundation population as well as research studies on this segment of the Third Sector should distinguish foundations by the nature of their funding.

One contribution of this study is the creation of a unique panel data base which includes small and large foundations and covers twelve of the most recent tax years. This data source is more informative than anecdotal evidence, surveys, or studies with aggregated data and can be expanded as new data becomes available. Stratification of foundations by key descriptive characteristics and investigation of the results of decisions made by foundation managers pulls together elements in the

previous literature on private foundation. The proposed model of foundation specific characteristics, and comparison of the proposed model to others suggested by the literature, provides an initial econometric finding that there are significant interindustry differences among foundations.

A general conclusion drawn from this study is that, as suggested by Oleck [1988, p. 162], foundation problems are now more managerial than tax related. Small and flow-through foundations appear to more than meet the minimum distribution provisions of the tax law. However, the extent to which these foundations meet their stewardship responsibility to manage assets for the public good is an empirical question. Finally, it is recognized that the methodologies to assess whether a tax law had the effect intended by Congress are still in the development stage.

APPENDICES

Appendix A

SAMPLE FOUNDATION INFORMATION

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Talbert & Leota Abrams	38-6082194	2	4	2	8.97	6.44	74.11	-0.86
AEI Scholarship	38-2088329	1	2	3	4.27	6.73	-19.09	12.93
Akers	34-6549129	1	2	2	27.70	7.86	18.04	2.56
Forrest H. Akers	38-6066391	1	4	2	6.12	5.04	-5.24	16.76
Robert & Marjorie Alpern	38-6162747	1	2	3	6.02	5.46	-18.66	19.02
Americana	38-2269431	2	5	2	5.17	11.31	712.86	13.50
Phil O. & Amanda S. Aprill	38-1908614	1	2	3	6.73	5.12	-27.10	10.88
Charles Shirley Avery	38-6218309	1	4	3	5.86	6.46	-9.75	15.07
Harry E. Bagley	23-7058608	1	2	3	10.29	9.60	-8.40	12.77
Baldwin	38-6085641	1	4	2	7.06	5.49	5.37	8.99
Theodore & Mina Bargman	38-6087158	1	4	2	3.32	5.20	3.60	4.04
Barstow	38-6151026	1	4	2	5.05	4.93	7.65	26.60
Charles M. Bauervic	38-6146352	1	4	2	5.05	4.85	-16.95	-1.19
Alvin M. Bentley	38-6076280	1	4	2	7.88	3.67	-2.06	11.69
C.P. & I. B. Bentley	38-6043873	1	3	3	6.87	8.38	-13.02	5.56
Edward & June Bernstein	38-6087510	2	2	2	48.30	16.87	-19.51	3.89

114

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Besser	38-6071938	1	6	1	8.19	5.78	68.98	19.85
A. G. Bishop	38-6040693	1	4	1	5.39	5.93	-20.21	27.89
Bizer	38-6087554	1	1	2	15.55	17.52	-19.4	0.50
Louis C. Blumberg	38-6089255	1	2	2	13.41	10.36	354.29	21.62
Arthur & Doris Boschan	38-1775596	1	2	2	8.00	9.20	10.27	170.9
Arnold & Gertrude Boutell	38-6040492	1	5	2	6.73	9.13	-10.77	-5.15
Samuel Higby Camp	38-1643281	1	4	2	5.08	9.29	-15.22	17.89
William & Marie Carls	38-6099935	2	3	2	188.8	89.98	-9.03	8.68
Catsman	38-1840224	1	1	2	1.00	21.71	4.15	1.14
Gerald W. Chamberlin	38-6055730	1	4	2	9.24	7.29	-15.16	8.38
Chapman Scholarship	38-6088631	1	1	2	5.17	5.16	-8.36	6.68
William B. Chase	38-6081009	1	2	3	0.57	9.25	-6.47	10.54
Peter C. & Emajean Cook	38-6065735	1	1	2	17.13	10.44	174.0	-26.37
Deseranno Educational	23-7005737	1	4	2	10.43	11.80	-8.46	8.92
Detroit Industrial School	38-1360534	1	3	2	6.27	5.57	-5.54	7.18
Charles DeVlieg	38-6075696	1	4	2	6.50	9.06	-9.25	7.27
Richard & Helen DeVos	23-7066873	2	6	3	8.02	13.13	7.31	6.10
Dexter Charitable	38-6050438	1	2	1	4.94	6.50	-24.92	10.03
Edward & Ruth Diehl	38-6089393	1	4	1	6.11	4.75	-16.17	11.59

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Herbert & Junia Doan	38-6078714	1	4	2	5.19	4.74	-25.61	25.81
Doeren Mayhew	38-6147314	1	1	2	6.9	10.18	536.3	3.2
Henry S. & Mala Dorfman	23-7191091	2	2	3	37.48	24.44	-15.89	2.62
Alden & Vada Dow	38-6058512	1	4	2	5.59	5.49	19.28	25.91
Herbert H. & Grace A. Dow	38-1437485	1	8	1	5.38	7.40	-14.55	27.52
Herbert H. & Barbara C. Dow	38-6058513	1	5	2	4.84	4.59	-13.86	27.59
Dubin	38-6077556	2	1	2	121.9	62.8	46.1	-0.6
Earhart	38-6008273	1	6	1	0.00	0.11	-6.41	11.24
Earl-Beth	38-6055542	1	5	1	4.97	5.03	-9.93	17.81
Glenn Curtis Edmore	38-6173942	1	4	3	8.73	6.74	-21.80	20.02
Nathan & Yetta Epstein	38-6061256	2	1	2	22.94	17.26	-10.82	9.43
J. F. Ervin	38-6053755	1	4	2	6.82	6.05	-9.60	11.69
Ettenheimer	23-7038940	2	1	3	52.53	554.6	-23.36	-3.28
Charles Robert Evenson	38-6085626	1	2	2	11.07	8.59	425.44	9.63
H. T. Ewald	38-6007837	1	4	1	6.12	6.63	-10.15	14.25
Drusilla Farwell	38-6082430	1	4	1	6.68	5.66	-8.57	11.11
Milton & Sally Feldman	38-6064683	1	2	2	13.76	5.94	675.6	6.80
George R. & Elise M. Fink	38-6059952	1	4	2	6.57	7.96	1.48	8.78
Max & Marjorie S. Fisher	38-1784340	1	4	2	20.82	29.60	7.15	9.33

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Robert C. Fisher	23-7080589	1	2	3	7.04	5.79	-2.25	3.57
Edward I. Fleischman	38-6091812	1	4	2	9.05	11.17	-15.93	11.47
Benson & Edith Ford	38-6066333	1	5	1	23.34	9.96	25.17	24.13
Eleanor & Edsel Ford	38-6066331	1	6	1	14.25	6.69	103.9	21.77
Henry Ford II	38-6066332	1	5	2	15.68	10.88	-11.73	17.43
John B. & Mary H. Ford	38-6046560	1	2	3	6.48	12.15	-4.47	10.89
Walter & Josephine Ford	38-2572982	1	5	2	25.64	13.67	4.71	5.36
William & Martha Ford	38-6066335	1	4	2	24.78	22.39	24.81	21.00
Samuel & Jean Frankel	38-6088399	1	2	2	26.76	9.28	-32.56	12.33
Fruehauf	23-7015744	1	4	2	5.76	9.49	-12.50	13.99
Gast	38-6146354	1	2	2	5.04	7.14	-3.17	3.47
George	38-6115722	1	2	3	5.20	5.89	-34.59	4.42
Rollin M. Gerstacker	38-6060276	1	7	2	4.40	5.74	-29.59	26.22
Herman & Irene Gertz	38-6153472	1	3	2	6.89	5.52	-15.69	10.18
Nathan & Betty Goldin	38-6085170	2	1	2	71.74	70.65	51.7	-8.80
Harry & Bertha A. Goldman	51-0147560	1	1	3	11.98	9.58	19.1	-6.40
Gordy	38-6149511	1	4	2	6.64	6.73	76.35	6.57
Gornick	38-6063404	1	4	2	4.67	4.77	-19.20	21.07
Gossett	38-6061739	1	4	2	6.76	6.82	-10.35	27.57

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Leslie & Edith Green	38-6162077	1	4	3	4.87	8.95	0.85	61.35
L.H. & E.C. Green Family	38-6162077	1	2	2	8.54	.74	52.82	7.75
Charles Grosberg	38-6088859	1	4	1	6.63	6.63	35.87	14.73
Harder	38-6048242	1	5	2	11.67	4.32	-6.94	9.02
Charles Stewart Harding	38-6081208	1	5	2	6.28	15.14	-18.19	4.04
Hass	38-6088674	1	2	2	5.54	7.12	-6.39	4.99
Heany Charitable	38-6159856	1	1	2	12.62	13.98	61.30	-1902
David M. & Joyce F. Hecht	39-6106992	1	1	2	10.63	13.14	4.80	0.80
S. & L. Hechtman	38-6062276	2	1	2	32.15	120.3	-21.75	5.58
Heritage Mark	23-7017100	2	4	2	25.08	23.60	-21.64	8.91
John & Rose Herman	23-7041624	1	4	2	6.30	8.38	-10.54	7.86
Herrick	38-6041517	1	8	1	6.46	4.76	-14.45	15.54
Robert D. Hill	38-6071614	1	2	2	4.75	4.65	-9.18	12.32
Clarence & Jack Himmel	51-0140773	1	4	3	7.15	5.96	-6.13	12.41
W. & S.E. Hinman	38-6069372	1	4	1	8.50	7.14	-16.32	11.68
James & Lynell Holden	38-6052154	1	5	1	10.20	9.83	-17.51	13.14
Holley	38-6055168	1	4	1	5.56	6.25	-8.50	14.86
Honigman	38-6059254	1	4	2	9.81	4.63	10.68	8.54
Hurst	38-6089457	1	4	2	5.54	5.96	6.51	6.13

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Stanley Imerman Memorial	23-7152760	1	4	3	9.23	5.42	-21.18	11.29
India	23-7300230	2	4	3	23.84	4.60	-33.22	76.95
Michael Jeffers Memorial	23-7059762	1	4	2	8.58	9.32	-11.92	13.75
Paul A. Johnson	38-6048818	1	2	3	5.78	14.74	-4.51	15.34
A. Kahn Association of Architects & Engineers	38-2133518	2	1	2	72.11	474.6	381.5	60.1
Kantzler	23-7422733	1	4	3	4.81	5.08	-7.68	10.01
Katzman	38-6064688	1	1	2	7.64	8.93	-7.30	4.73
Kaufman	38-6091556	2	4	2	64.83	6.60	-10.67	1.10
Louis G. Kaufman	38-6048505	1	4	1	4.79	6.51	18.77	10.31
W. K. Kellogg	38-1359264	2	8	1	121.1	107.1	36.28	8.48
Elizabeth E. Kennedy	38-6063463	1	4	2	6.81	6.56	-8.94	10.37
Kiwanis of Michigan	38-1723513	2	2	2	44.28	34.44	3.75	2.41
Knudsen	38-6139448	1	2	2	8.36	18.45	-13.36	8.90
Kogan	38-6064802	1	4	1	11.86	6.43	-32.47	3.55
Harry B. & Anna Korman	38-6078083	1	3	2	6.60	6.14	9.46	8.21
Kresge	38-1359217	1	8	1	5.51	5.13	-9.34	7.48
Bernie J. Lemmen	38-6069061	1	2	2	6.08	6.33	3.30	13.67
Edward C. Levy	38-6091368	1	4	3	35.16	25.61	-25.68	3.42
Lincoln Health Care	38-1359220	1	4	-1	4.87	5.09	251.9	10.79

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Loutit	38-6053445	1	4	2	13.00	12.36	-15.42	7.80
Malcolm & Beth Lowenstein	38-6092530	1	2	2	10.41	127.2	-1.24	4.21
LTR Foundation	38-6070180	1	1	2	12.49	15.17	-12.64	14.56
Lurie-Polasky	38-6107372	2	2	2	1446.	1408.	38.89	1.96
Lyon	38-6121075	1	4	2	6.31	5.39	-14.44	11.13
Benard L. Maas	38-6058127	1	5	1	9.82	9.04	92.63	10.97
H. H. MacKey Educational	38-6058127	1	1	3	7.59	6.02	-1.90	10.9
Magline Charitable	38-6082038	1	1	2	14.95	4.82	-33.93	9.87
Malpass	38-6048813	1	2	2	4.98	66.09	-19.06	11.74
Alex & Marie Manoogian	38-6089952	1	6	1		.	-18.10	11.82
Marantha	38-6108739	1	4	2	26.78	7.16	0.69	7.71
Mardigian	38-6048886	2	4	2	6.68	4.39	-17.65	10.34
McColl-Batts	38-6052870	1	4	2	12.24	15.63	115.3	5.63
McGregor	38-0808800	1	7	1	5.50	4.78	12.24	12.14
B.D. & Jane E. McIntyre	38-6046718	1	4	2	4.38	6.74	117.5	9.47
C.S. & Marion F. McIntyre	38-6046733	1	4	2	16.52	1.55	0.99	7.64
W.D. & Prudence McIntyre	38-6046659	1	3	2	4.59	5.41	3.59	11.32
Mendel	38-6099787	1	4	2	5.99	7.93	-16.07	12.27
Michigan Agri-Dealers	38-2086180	1	1	3	4.62	8.17	-34.99	6.37

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Roy Michell Charitable	38-6071109	1	4	2	3.43	10.71	-3.54	11.40
Albert & Louise Miller	38-6064925	1	6	2	8.85	6.70	77.74	17.85
Stanley O. Miller	38-6062439	1	3	2	7.74	12.32	10.30	7.63
Mitchell	38-6091190	1	2	2	2.04	0.94	-3.37	12.83
Molloy	38-6061859	1	4	2	35.29	9.67	-18.43	7.67
C. F. Moore	38-6055559	1	4	2	4.39	3.28	-10.03	15.38
Morley Brothers	38-6055569	1	4	1	7.72	5.72	-4.93	16.23
Morrison	38-6099755	1	4	2	55.00	6.36	12.47	7.16
Charles Stewart Mott	38-1211227	1	8	1	5.75	5.05	-28.93	204.7
John O. Muir	38-6093567	1	1	2	4.69	13.22	-6.40	0.30
Amos Nordman	23-7251583	2	4	3	307.6	112.7	-20.52	912.1
Oleson	38-6083080	1	4	2	8.23	7.88	-26.10	2.41
Robert G. & Cleia S. Olson	38-6074650	1	2	2	6.79	6.56	-3.51	12.34
Elsa U. Pardee	38-6065799	1	7	1	1.41	0.32	-13.28	26.57
J. M. Pincus	38-6066601	2	1	2	59.32	77.63	7.08	8.07
Pipp	38-6041733	1	3	2	7.58	7.07	37.44	11.71
Plym	38-6069680	1	4	2	5.81	5.88	-1.52	5.36
PM	38-1802049	1	1	2	5.81	16.56	-27.35	-4.66
Ralph L. & Winifred E. Polk	38-6080075	1	4	2	7.09	5.55	-5.07	19.99

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Meyer & Anna Prentis	38-6090332	1	5	2	5.21	6.86	-8.59	10.82
Radom	23-7086544	2	1	3	1.70	2.64	-17.32	6.24
Charles & Ellen Randall	38-6048819	1	1	2	7.15	3.63	-0.20	4.80
Ransom Fidelity	38-1485403	1	4	1	4.72	5.44	-18.71	2.44
Milton M. Ratner	38-6160330	1	5	2	6.18	5.64	-6.055	11.76
Renaud	38-6091781	1	1	2	6.07	27.72	-24.69	-13.59
R. E. Riebel	23-7239704	1	1	3	6.21	7.90	9.20	5.90
Harold & Carolyn Robison	38-6105557	1	3	2	5.27	5.64	-9.87	16.32
Sigmund & Sophie Rohlik	38-6056443	1	4	2	4.71	3.90	-7.77	18.99
Roney	38-6091222	1	2	2	5.86	6.00	4.28	10.55
Sage	38-6041518	1	6	2	6.17	4.59	-11.16	14.21
Lillian H. & Karl W. Scott	38-6065953	1	4	2	9.98	4.40	6.37	8.49
Sehn	38-6160784	2	4	2	17.18	2.74	-24.74	13.36
Seidman Family	13-6098204	1	4	2	4.49	4.78	-13.20	9.74
Seymour/Troester	38-6062647	1	4	1	6.23	5.69	-0.16	8.72
Nate S. & Ruth B. Shapero	38-6041567	1	4	1	4.85	7.65	-7.32	10.40
Elizabeth, Allan & Warren Shelden	38-6052198	1	4	1	10.00	7.82	-28.11	12.51
L. & J. Wade Shepard	38-6101349	1	3	2	6.37	7.35	-8.40	7.93
Shiffman	38-1396850	1	4	1	9.98	8.43	0.26	5.52

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Simmons	38-6075922	1	4	2	5.05	6.18	12.98	11.53
Harry A. Sisson	38-6043587	1	2	2	5.03	5.75	-6.70	30.11
Skillman	38-1675780	2	8	2	2274.	1372.	-25.32	2.61
William E. Slaughter Jr.	38-6065616	1	4	2	6.54	10.26	-22.71	8.66
Social Welfare League	38-6091461	1	1	3	9.32	8.98	-18.50	3.60
E.C. & H.L. Stephenson	38-6172669	1	4	3	6.23	6.44	0.04	15.70
Charles J. Strosaker	38-6062787	1	6	2	8.89	7.23	-13.30	24.28
W.B. & Candace Thoman	23-7029842	1	4	2	6.08	39.73	-13.52	11.13
Thorn Apple	38-6095412	1	2	2	4.64	7.93	-16.32	21.77
Tiscornia	38-1777343	1	4	1	5.32	4.53	-9.97	10.18
Harry A. & Margaret D. Towsley	38-6091798	1	6	2	0.65	4.55	-33.88	24.51
Emmet & Frances Tracy	38-6057796	2	4	2	57.32	72.59	-18.92	1.46
Martin Trepel	13-2672028	2	1	3	1317.	3111.	-25.20	-3.80
Triford	23-7003478	1	4	2	5.59	4.22	-8.90	17.20
Katherine Tuck	38-6040079	1	6	1	4.35	13.73	-21.13	57.27
Harold & Grace Upjohn	38-6052963	1	5	2	6.09	5.69	-11.10	12.42
Jay & Betty VanAndel	23-7066716	2	5	2	5.30	7.37	10.01	9.98
F. & Mollie VanDervoort	38-6190789	1	4	3	8.25	7.67	4.80	10.88
Verndale	38-6071372	1	1	2	14.77	4.73	6.00	17.10

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
Vicksburg	38-6065237	1	4	1	5.01	5.00	-9.67	10.77
Vlasic	38-6077329	1	4	2	7.52	5.35	-2.04	20.59
Frederick A. Vollbrecht	38-6056173	1	4	2	5.14	6.13	-10.26	12.03
Vomberg	38-6072845	1	3	2	9.78	12.23	-20.01	3.76
L.C. & Margaret Walker	38-6060045	1	5	2	6.69	6.32	29.29	0.20
Wege	38-6124363	1	4	2	6.23	5.86	-0.07	25.68
James A. Welch	38-1690381	1	4	2	5.34	5.28	149.2	10.67
Henry & Consuelo Wenger	38-6077419	1	5	2	3.76	6.28	7.52	16.45
Samuel L. Westerman	23-7108795	2	5	3	5.26	20.51	-20.44	15.43
J. & Elizabeth Whiteley	38-1558108	1	4	2	4.99	5.25	-7.81	8.75
Whiting	38-6056693	1	6	1	6.27	3.66	-19.80	17.59
Henry & Harriet Whiting	38-6091633	1	4	2	4.88	4.37	-11.29	14.23
James H. Whiting Auditorium	38-6041292	1	4	2	7.05	7.52	-16.57	7.40
David M. Whitney	38-6040080	2	4	1	9.74	9.54	-15.32	14.60
Harvey Randall Wickes	38-6061470	1	6	1	5.55	5.36	6.76	10.13
Wickson-Link	38-6083931	1	4	2	1.87	8.93	-20.99	13.76
Mathilda R. Wilson	38-6087665	1	6	1	4.56	6.74	-27.70	12.22
Wineman	38-6057949	1	1	2	8.66	21.35	-26.98	14.32
Winship Memorial	38-6092543	1	4	2	5.65	7.11	-11.92	10.90

Appendix A (Cont'd.)

FOUNDATION, TRUST, or FUND NAME	FEDERAL ID#	TYPE	SIZE	AGE	PRE-ERTA Pay-out Rate	POST-ERTA Pay-out Rate	PRE-ERTA Rate of Return	POST-ERTA Rate of Return
William & Dorothy Zehnder	23-7321185	1	2	3	5.58	12.99	-13.19	8.25
Mary & George H. Zimmerman	38-1685880	1	4	1	5.44	6.27	-11.79	17.45

Type 1 = Endowment-type foundations; Type 2 = Flow-through-type foundations

Size 1 = Fair market value (FMV) of assets in 1987 < $100,000
Size 2 = $100,000 < FMV of assets < $499,999
Size 3 = $500,000 < FMV of assets < $999,999
Size 4 = $1,000,000 < FMV of assets < $4,999,999
Size 5 = $5,000,000 < FMV of assets < $9,999,999
Size 6 = $10,000,000 < FMV of assets < $49,999,999
Size 7 = $50,000,000 < FMV of assets < $99,999,999
Size 8 = FMV of assets > $100,000,000

Age 1 = Incorporated before 1950; Age 2 = 1950 to 1969; Age 3 = After 1969

*

Appendix B

SURVEY INSTRUMENT

Foundation Name _____   Date _____

Is it true that this foundation:

                                                    YES   NO

1)   has been in existence for the entire period ____   ____
     1976 to the present;

2)   is classified as an independent foundation   ____   ____
     (rather than a corporate, operating, or
     community foundation); and

3)   has a "term of existence" of perpetuity   ____   ____
     (rather than termination at a specific
     date in the future)?

The eight "fields of endeavor" or "recipient-types" listed below are commonly used to classify foundations each year.

Please rank each "field of endeavor" in an order which represents the percentage of grants given for that year.

Assign #1 to the recipient area which received the largest share of grants given that year, #2 for the next largest share, etc. If no money was given to a recipient-type, then leave it blank.

For example, if the foundation gave primarily to hospitals and health related recipients in 1987 followed by some grants to a university, then assign #1 to Medicine/Health, #2 to Education/Scholarships, and leave the other spaces blank. A foundation which supports only the Arts will assign a #1 to Culture/Arts & Humanities and leave all other lines blank. A foundation which supports all these causes will assign #1 through #8 to the fields of endeavor with #8 representing the smallest share.

	76	77	78	79	80	81	82	83	84	85	86	87
Medicine/ Health	--	--	--	--	--	--	--	--	--	--	--	--
Culture/ Arts & Humanities	--	--	--	--	--	--	--	--	--	--	--	--
Economic Development/ Civic/Public Affairs	--	--	--	--	--	--	--	--	--	--	--	--
Education/ Scholarships	--	--	--	--	--	--	--	--	--	--	--	--
Science	--	--	--	--	--	--	--	--	--	--	--	--
Religion Human Service/ Social Welfare	--	--	--	--	--	--	--	--	--	--	--	--
Other	--	--	--	--	--	--	--	--	--	--	--	--

Person completing this questionnaire _____
Position _____

Would you be available for a follow-up interview, either by

phone: YES _____   NO _____

in person: YES _____   NO _____

phone number _____

Would you send me a copy of your most recent annual financial report? This may take the form of a booklet including audited financial statements or a short pamphlet available to the public.

Any other comments:

Appendix C

Form **990-PF**

Department of the Treasury
Internal Revenue Service

Return of Private Foundation
or Section 4947(a)(1) Trust Treated as a Private Foundation

Note: You may be able to use a copy of this return to satisfy state reporting requirements

OMB No 1545-0052

1987

For the calendar year 1987, or tax year beginning _____ 1987, and ending _____ 19___

Please type, print, or attach label. See Specific Instructions.

Name of organization

Address (number and street)

City or town, state, and ZIP code

Employer identification number

State registration number (see instructions)

Fair market value of assets at end of year

V1

If application pending, check here ▶ ___ Foreign organizations, check here ▶ ___ Please attach check or money order here

Check type of organization

___ Exempt private foundation ___ 4947(a)(1) trust ___ Other taxable private foundation

Section 4947(a)(1) trusts filing this form in lieu of Form 1041, check here and see General Instructions ▶ ___

If the foundation is in a 60-month termination under section 507(b)(1)(B), check here ▶ ___

The books are in care of ▶ _____

Located at ▶ _____ Telephone no ▶ _____

Check this box if your private foundation status terminated under section 507(b)(1)(A) ▶ ___

Part I Analysis of Support, Revenue, and Expenses (see instructions for Part I)

		(a) Revenue and expenses per books	(b) Net investment income	(c) Adjusted net income	(d) Disbursements for charitable purpose
Support and Revenue	1 Contributions, gifts, grants, etc., received (attach schedule)	**V2**			
	2 Contributions from split-interest trusts				
	3 Interest on savings and temporary cash investments	**V3**			
	4 Dividends and interest from securities				
	5a Gross rents				
	b (Net rental income (loss) _____)				
	6 Net gain or (loss) from sale of assets not on line 10				
	7 Capital gain net income				
	8 Net short-term capital gain				
	9 Income modifications				
	10a Gross sales minus returns and allowances				
	b Minus: Cost of goods sold (attach schedule)				
	c Gross profit (loss)				
	11 Other income (attach schedule)				
	12 Total (add lines 1 through 11)	**V4**	**V10**		
Operating and Administrative Expenses	13 Compensation of officers, directors, trustees, etc.	**V5**			
	14 Other employee salaries and wages	**V6**			
	15 Pension plans, employee benefits				
	16a Legal fees				
	b Accounting fees	**V7**			
	c Other professional fees				
	17 Interest				
	18 Taxes (attach schedule)				
	19 Depreciation and depletion				
	20 Occupancy				
	21 Travel, conferences, and meetings				
	22 Printing and publications				
	23 Other expenses (attach schedule)				
	24 Total operating and administrative expenses (add lines 13 through 23)				
	25 Contributions, gifts, grants paid	**V8**			
	26 Total expenses and disbursements (add lines 24 and 25)				**V13**
	27a Excess of revenue over expenses and disbursements (line 12 minus line 26)	**V9**			
	b Net investment income (if negative enter -0-)		**V11**		
	c Adjusted net income (if negative enter -0-)			**V12**	

For Paperwork Reduction Act Notice, see page 1 of the instructions.

Form **990-PF** (1987)

Form 990-PF (1987)

Part II	**Balance Sheets**	Attached schedules should be for end of year amounts only (See instructions for col (c))	Beginning of year (a) Book Value	End of year (b) Book Value	(c) Fair Market Value
	1 Cash—non-interest-bearing				
	2 Savings and temporary cash investments				
	3 Accounts receivable ▶				
	minus allowance for doubtful accounts ▶				
	4 Pledges receivable ▶				
	minus allowance for doubtful accounts ▶				
	5 Grants receivable				
Assets	6 Receivables due from officers, directors, trustees, and other disqualified persons (see instructions)				
	7 Other notes and loans receivable ▶				
	minus allowance for doubtful accounts ▶				
	8 Inventories for sale or use				
	9 Prepaid expenses and deferred charges				
	10 Investments—securities (attach schedule)				
	11 Investments—land, buildings, and equipment: basis ▶				
	minus accumulated depreciation (attach schedule) ▶			V15	V16
	12 Investments—mortgage loans				
	13 Investments—other (attach schedule)				
	14 Land, buildings, and equipment: basis ▶				
	minus accumulated depreciation (attach schedule) ▶				
	15 Other assets (describe ▶)				
	16 Total assets (see instructions)			V17	V18
	17 Accounts payable and accrued expenses				
	18 Grants payable				
Liabilities	19 Support and revenue designated for future periods (attach schedule)				
	20 Loans from officers, directors, trustees, and other disqualified persons				
	21 Mortgages and other notes payable (attach schedule)				
	22 Other liabilities (describe ▶)				
	23 Total liabilities (add lines 17 through 22)				
	Organizations that use fund accounting, check here ▶ ☐ and complete lines 24 through 27 and lines 31 and 32.				
Fund Balances or Net Worth	24a Current unrestricted fund				
	b Current restricted fund				
	25 Land, buildings, and equipment fund				
	26 Endowment fund				
	27 Other funds (Describe ▶)				
	Organizations not using fund accounting, check here ▶ ☐ and complete lines 28-32.				
	28 Capital stock or trust principal				
	29 Paid-in or capital surplus				
	30 Retained earnings or accumulated income				
	31 Total fund balances or net worth (see instructions)				
	32 Total liabilities and fund balances/net worth (see instructions)				

Part III	**Analysis of Changes in Net Worth or Fund Balances**

1 Total net worth or fund balances at beginning of year—Part II, column (a), line 31		
2 Enter amount from Part I, line 27a		
3 Other increases not included in line 2 (itemize) ▶		
4 Add lines 1, 2, and 3		
5 Decreases not included in line 2 (itemize) ▶		
6 Total net worth or fund balances at end of year (line 4 minus line 5)—Part II, column (b), line 31		V19

Part IV   Capital Gains and Losses for Tax on Investment Income

(a) List and describe the kind(s) of property sold. e.g. real estate. 2-story brick warehouse, or common stock 200 shs MLC Co	(b) How acquired P—Purchase D—Donation	(c) Date acquired (mo day yr)	(d) Date sold (mo day yr)
1			

(e) Gross sales price minus expense of sale	(f) Depreciation allowed (or allowable)	(g) Cost or other basis	(h) Gain or (loss) (e) plus (f) minus (g)

Complete only for assets showing gain in column (h) and owned by the foundation on 12/31/69			(l) Losses (from col (h)) Gains (excess of col (h) gain over col (k), but not less than zero)
(i) F M V as of 12 31 69	(j) Adjusted basis as of 12/31 69	(k) Excess of col (i) over col (j) if any	

2   Capital gain net income or (net capital loss) . . { If gain, also enter in Part I, line 7 } { If (loss), enter -0- in Part I, line 7 }

3   Net short-term capital gain (loss) as defined in sections 1222(5) and (6)
If gain, also enter in Part I, line 8 (see instructions for line 8) }
If loss, enter -0- in Part I, line 8 . . . . }

Part V   Qualification Under Section 4940(e) for Reduced Tax on Net Investment Income

(For optional use by domestic private foundations subject to section 4940(a) tax on net investment income.)

If section 4940(d)(2) applies, leave Part V blank.

Were you liable for section 4942 tax on the distributable amount of any year in the base period? . . . . . . ☐ Yes ☐ No
If "Yes," you do not qualify under section 4940(e). Do not complete this part.

1   Enter the appropriate amount in each column for each year; see instructions before making any entries.

(a) Base period years Calendar year (or fiscal year beginning in)	(b) Qualifying distributions	(c) Net value of noncharitable-use assets	(d) Payout ratio (column (b) divided by column (c))
1986			
1985			
1984			
1983			
1982			

2   Total of line 1, column (d) . . . .

3   Average payout ratio for the 5-year base period—divide the total on line 2 by 5, or by the number of years the foundation has been in existence if less than 5 years. . . . .

4   Enter the net value of noncharitable-use assets for 1987 from Part IX, line 5 . . . .

5   Multiply line 4 by line 3 . . . .

6   Enter 1% of Part I, line 27b . . . .

7   Add lines 5 and 6 . . . .

8   Enter the amount from Part XIII, line 6 ·
If line 8 is equal to or greater than line 7, check the box in Part VI, line 1b, and complete that part using a 1% tax rate. See the Part VI instructions.

Form 990 PF (1987) Appendix C (Cont'd.) Page 4

Part VI — Excise Tax on Investment Income (Section 4940(a), 4940(b), 4940(e), or 4948—see instructions)

1a Exempt operating foundations described in section 4940(d)(2), check here __ (attach copy of ruling letter if necessary—see instructions) and enter "N/A"

b Domestic organizations that meet the section 4940(e) requirements in Part V, check here __ and enter 1% of Part I, line 27b

c All other domestic organizations enter 2% of line 27b. Exempt foreign organizations enter 4% of line 27b

2 Tax under section 511 (domestic section 4947(a)(1) trusts and taxable foundations only. Others enter -0-)

3 Add lines 1 and 2

4 Tax under subtitle A (domestic section 4947(a)(1) trusts and taxable foundations only. Others enter -0-)

5 Tax on investment income (line 3 minus line 4 (but not less than -0-))

6 Credits/Payments:

a 1987 estimated tax payments/1986 overpayment credited to 1987

b Exempt foreign organizations—tax withheld at source

c Tax paid with application for extension of time to file (Form 2758)

7 Total credits and payments (add lines 6a, b, and c)

8 Enter any PENALTY for underpayment of estimated tax. Check here ☐ if Form 2220 is attached

9 TAX DUE. If the total of lines 5 and 8 is more than line 7, enter AMOUNT OWED ▶

10 OVERPAYMENT. If line 7 is more than the total of lines 5 and 8, enter the AMOUNT OVERPAID ▶

11 Enter the amount of line 10 you want: Credited to 1988 estimated tax ▶ | Refunded ▶

Part VII — Statements Regarding Activities

File Form 4720 if you answer "No" to question 10b, 11b, or 14b or "Yes" to question 10c, 12b, 13a, or 13b, unless an exception applies. **Yes No**

1a During the tax year, did you attempt to influence any national, state, or local legislation or did you participate or intervene in any political campaign?

b Did you spend more than $100 during the year (either directly or indirectly) for political purposes (see instructions for definition)?
If you answered "Yes" to 1a or 1b, attach a detailed description of the activities and copies of any materials published or distributed by the organization in connection with the activities.

c Did you file Form 1120-POL?

2 Have you engaged in any activities that have not previously been reported to the Internal Revenue Service?
If "Yes," attach a detailed description of the activities.

3 Have you made any changes, not previously reported to the IRS, in your governing instrument, articles of incorporation, or bylaws, or other similar instruments? If "Yes," attach a conformed copy of the changes

4a Did you have unrelated business gross income of $1,000 or more during the year?

b If "Yes," have you filed a tax return on Form 990-T for this year?

5 Was there a liquidation, termination, dissolution, or substantial contraction during the year?
If "Yes," attach the schedule required by General Instruction I.

6 Are the section 508(e) requirements satisfied either:
• by language written into the governing instrument, or
• by state legislation that effectively amends the governing instrument so that no mandatory directions that conflict with the state law remain in the governing instrument?

7 Did you have at least $5,000 in assets at any time during the year?
If "Yes," complete Part II, column (c), and Part XVI.

8a Enter states to which the foundation reports or with which it is registered (see instructions) ▶ ....

b If you answered 7 "Yes," have you furnished a copy of Form 990-PF to the Attorney General (or his or her designate) of each state as required by the General Instructions? If "No," attach explanation

9 Are you claiming status as a private operating foundation within the meaning of section 4942(j)(3) or 4942(j)(5) for calendar year 1987 or fiscal year beginning in 1987 (see instructions for Part XV)? If "Yes," complete Part XV.

10 Self-dealing (section 4941):
a During the year did you (either directly or indirectly):
(1) Engage in the sale or exchange, or leasing of property with a disqualified person?
(2) Borrow money from, lend money to, or otherwise extend credit to (or accept it from) a disqualified person?
(3) Furnish goods, services, or facilities to (or accept them from) a disqualified person?
(4) Pay compensation to or pay or reimburse the expenses of a disqualified person?
(5) Transfer any of your income or assets to a disqualified person (or make any of either available for the benefit or use of a disqualified person)?
(6) Agree to pay money or property to a government official? (Exception: check "No" if you agreed to make a grant to or to employ the official for a period after he or she terminates government service if he or she is terminating within 90 days.)

Form 990 PF (1987)   **Appendix C (Cont'd.)**   Page 5

Part VII	**Statements Regarding Activities** (continued)

		Yes	No
10b	If you answered "Yes" to any of questions 10a(1) through (6), were the acts you engaged in excepted acts as described in regulations section 53 4941(d)-3 and 4?		
c	Did you engage in a prior year in any of the acts described in 10a, other than excepted acts, that were acts of self-dealing that were not corrected by the first day of your tax year beginning in 1987?		
11	Taxes on failure to distribute income (section 4942) (does not apply for years you were a private operating foundation as defined in section 4942(j)(3) or 4942(j)(5)).		
a	Did you at the end of tax year 1987 have any undistributed income (lines 6d and e, Part XIV) for tax year(s) beginning before 1987?		
	If "Yes," list the years ▶		
b	If "Yes" to 11a, are you applying the provisions of section 4942(a)(2) (relating to incorrect valuation of assets) to the undistributed income for ALL such years?		
c	If the provisions of section 4942(a)(2) are being applied to ANY of the years listed in 11a, list the years here and see the instructions ▶		
12	Taxes on excess business holdings (section 4943):		
a	Did you hold more than a 2% direct or indirect interest in any business enterprise at any time during the year?		
b	If "Yes," did you have excess business holdings in 1987 as a result of any purchase by you or disqualified persons after May 26, 1969; after the lapse of the 5-year period (or longer period approved by the Commissioner under section 4943(c)(7)) to dispose of holdings acquired by gift or bequest; after the lapse of the 10-year first phase holding period, or after the 15-year first phase holding period?		
	Note: You may use Schedule C, Form 4720, to determine if you had excess business holdings in 1987 •		
13	Taxes on investments that jeopardize charitable purposes (section 4944):		
a	Did you invest during the year any amount in a manner that would jeopardize the carrying out of your charitable purposes?		
b	Did you make any investment in a prior year (but after December 31, 1969) that could jeopardize your charitable purpose that you had not removed from jeopardy on the first day of your tax year beginning in 1987?		
14	Taxes on taxable expenditures (section 4945):		
a	During the year did you pay or incur any amount to:		
	(1) Carry on propaganda, or otherwise attempt to influence legislation by attempting to affect the opinion of the general public or any segment thereof, or by communicating with any member or employee of a legislative body, or by communicating with any other government official or employee who may participate in the formulation of legislation?		
	(2) Influence the outcome of any specific public election, or to carry on, directly or indirectly, any voter registration drive?		
	(3) Provide a grant to an individual for travel, study, or other similar purposes?		
	(4) Provide a grant to an organization, other than a charitable, etc., organization described in section 509(a) (1), (2), or (3), or section 4940 (d)(2)?		
	(5) Provide for any purpose other than religious, charitable, scientific, literary, or educational purposes, or for the prevention of cruelty to children or animals?		
b	If you answered "Yes" to any of questions 14a(1) through 14a(5), were all such transactions excepted transactions as described in regulations section 53.4945?		
c	If you answered "Yes" to question 14a(4), do you claim exemption from the tax because you maintained expenditure responsibility for the grant?		
	If "Yes," attach the statement required.		
15	Did any persons become substantial contributors during the tax year?		
	If "Yes," attach a schedule listing their names and addresses.		
16	During this tax year did you maintain any part of your accounting/tax records on a computerized system?		
17	Section 4947(a)(1) trusts filing Form 990-PF in lieu of Form 1041, enter the amount of tax-exempt interest received or accrued ▶ $		

Part VIII	**Information About Officers, Directors, Trustees, Foundation Managers, Highly Paid Employees, and Contractors**

1 List all officers, directors, trustees, foundation managers and, if paid, their compensation for 1987 (see instructions):

Name and address	Title, and average hours per week devoted to position	Contributions to employee benefit plans	Expense account, other allowances	Compensation (if any)
....				
....				
....				
....				
....				
Total			▶	

Part VIII Information About Officers, Directors, Trustees, etc. (continued)

2 Compensation of five highest paid employees for 1987 (other than included in line 1—see instructions):

Name and address of employees paid more than $30,000	Title and time devoted to position	Contributions to employee benefit plans	Expense account, other allowances	Compensation

Total number of other employees paid over $30,000 ▶

3 Five highest paid persons for professional services for 1987 (see instructions):

Name and address of persons paid more than $30,000	Type of service	Compensation

Total number of others receiving over $30,000 for professional services ▶

Part IX Minimum Investment Return

1 Fair market value of assets not used (or held for use) directly in carrying out charitable, etc., purposes:
  a Average monthly fair market value of securities
  b Average of monthly cash balances
  c Fair market value of all other assets (see instructions)
  d Total (add lines a, b, and c)
2 Acquisition indebtedness applicable to line 1 assets
3 Line 1d minus line 2
4 Cash deemed held for charitable activities—enter 1½% of line 3 (for greater amount, see instructions)
5 Line 3 minus line 4
6 Minimum investment return (enter 5% of line 5)   **V20**

Part X Computation of Distributable Amount (see instructions)

1 Minimum investment return from Part IX, line 6
2 Total of:
  a Tax on investment income for 1987 from Part VI, line 5
  b Income tax under subtitle A, for 1987
3 Distributable amount before adjustments (line 1 minus line 2)
4 Additions to distributable amount:
  a Recoveries of amounts treated as qualifying distributions
  b Income distributions from section 4947(a)(2) trusts
5 Line 3 plus line 4
6 Deduction from distributable amount (see instructions)   **V21**
7 Distributable amount as adjusted (line 5 minus line 6) (Also enter in Part XIV, line 1.)

Part XI Limitation on Grant Administrative Expenses

Calendar year (or fiscal year beginning in)	(a) 1987	(b) 1986	(c) 1985	(d) Total
1 Net value of noncharitable-use assets (see instructions)				
2 Multiply line 1 by .0065				
3 Grant administrative expenses treated as qualifying distributions in the two preceding years				
4 Grant administrative expenses for 1987 (from Part XII, line 13)				
5 Maximum amount of 1987 grant administrative expenses that may be treated as qualifying distributions (line 2, column (d), minus line 3, column (d))				
6 Excess grant administrative expenses for 1987 (line 4 minus line 5; if negative, enter -0-; enter result in Part XIII, line 5)				
7 Grant administrative expenses treated as qualifying distributions in 1987 (line 4 minus line 6)				

Note: *The amount on line 7 will be used in completing the schedule for 1988 and 1989.*

Part XII Schedule of Grant Administrative Expenses (see instructions before making any entries)

1 Compensation of officers, directors, trustees, etc.	
2 Other employee salaries and wages	
3 Pension plans, employee benefits	
4 Legal fees	
5 Accounting fees	
6 Other professional fees	
7 Interest	
8 Taxes	
9 Occupancy	
10 Travel, conferences, and meetings	
11 Printing and publications	
12 Other expenses	
13 Total	

Part XIII Qualifying Distributions (see instructions)

1 Amounts paid (including administrative expenses) to accomplish charitable, etc., purposes:
   a Expenses, contributions, gifts, etc.—total from Part I, column (d), line 26
   b Program-related investments
2 Amounts paid to acquire assets used (or held for use) directly in carrying out charitable, etc., purposes
3 Amounts set aside for specific charitable projects that satisfy the:
   a Suitability test (prior IRS approval required)
   b Cash distribution test (attach the required schedule)
4 Total (add lines 1, 2, and 3)
5 Enter excess grant administrative expenses from Part XI, line 6
6 Total qualifying distributions (line 4 minus line 5). Enter this amount in Part XIV, line 4
7 Organizations that qualify under section 4940(e) for the reduced rate of tax on net investment income — enter 1% of Part I, line 27b (see instructions)
8 Qualifying distributions (line 6 minus line 7)

Note: *The amount on line 8 will be used in Part V, column (b), when calculating the section 4940(e) reduction of tax in subsequent years.*

Part XIV   **Computation of Undistributed Income (see instructions)**

		(a) Corpus	(b) Years prior to 1986	(c) 1986	(d) 1987
1	Distributable amount for 1987 from Part X				
2	Undistributed income, if any, as of the end of 1986				
a	Enter amount for 1986				
b	Total for prior years _____				
3	Excess distributions carryover, if any, to 1987				
a	From 1982 _____				
b	From 1983 _____				
c	From 1984 _____				
d	From 1985 _____				
e	From 1986 _____				
f	Total of 3a through e				
4	Qualifying distributions for 1987 _____				
a	Applied to 1986, but not more than line 2a				
b	Applied to undistributed income of prior years (Election required—see instructions)				
c	Treated as distributions out of corpus (Election required—see instructions)				
d	Applied to 1987 distributable amount				
e	Remaining amount distributed out of corpus				
5	Excess distributions carryover applied to 1987 (If an amount appears in column (d), the same amount must be shown in column (a))				
6	Enter the net total of each column as indicated below:				
a	Corpus. Add lines 3f, 4c, and 4e. Subtract line 5				
b	Prior years' undistributed income (line 2b minus line 4b)				
c	Enter the amount of prior years' undistributed income for which a notice of deficiency has been issued, or on which the section 4942(a) tax has been previously assessed				
d	Subtract line 6c from line 6b. Taxable amount— see instructions				
e	Undistributed income for 1986 (line 2a minus line 4a). Taxable amount— see instructions				
f	Undistributed income for 1987 (line 1 minus lines 4d and 5). This amount must be distributed in 1988				
7	Amounts treated as distributions out of corpus to satisfy requirements imposed by section 170(b)(1)(E) or 4942(g)(3) (see instructions)				
8	Excess distributions carryover from 1982 not applied on line 5 or line 7 (see instructions)				
9	Excess distributions carryover to 1988 (line 6a minus lines 7 and 8)				
10	Analysis of line 9:				
a	Excess from 1983 _____				
b	Excess from 1984 _____				
c	Excess from 1985 _____				
d	Excess from 1986 _____				
e	Excess from 1987 _____				

Form 990-PF (1987)   **Appendix C (Cont'd)**   Page **9**

Part XV — Private Operating Foundations (See instructions and Part VII, question 9)

1a If the foundation has received a ruling or determination letter that it is a private operating foundation, and the ruling is effective for 1987, enter the date of the ruling . . . . ▶

b Check box to indicate whether you are a private operating foundation described in section ☐ 4942(j)(3) or ☐ 4942(j)(5).

	Tax year	Prior 3 years			
	(a) 1987	**(b)** 1986	**(c)** 1985	**(d)** 1984	**(e)** Total
2a Enter the lesser of the adjusted net income from Part I or the minimum investment return from Part IX for 1987. 1986. and 1985 (Part VIII for 1984).					
b 85% of line 2a					
c Qualifying distributions from Part XIII, line 6. for 1987. 1986. and 1985 (Part X, line 4, for 1984)					
d Amounts included in line 2c not used directly for active conduct of exempt activities					
e Qualifying distributions made directly for active conduct of exempt activities (line 2c minus line 2d)					
3 Complete 3a. b. or c for the alternative test on which you rely:					
a "Assets" alternative test—enter:					
(1) Value of all assets					
(2) Value of assets qualifying under section 4942(j)(3)(B)(i)					
b "Endowment" alternative test—Enter ⅔ of minimum investment return shown in Part IX, line 6, for 1987. 1986. and 1985 (enter ⅔ of Part VIII, line 6, for 1984)					
c "Support" alternative test—enter:					
(1) Total support other than gross investment income (interest, dividends, rents. payments on securities loans (section 512(a)(5)). or royalties)					
(2) Support from general public and 5 or more exempt organizations as provided in section 4942(j)(3)(B)(iii)					
(3) Largest amount of support from an exempt organization					
(4) Gross investment income					

Part XVI — Supplementary Information (see instructions)

1   **Information Regarding Foundation Managers**

a List here any managers of the foundation who have contributed more than 2% of the total contributions received by the foundation before the close of any tax year (but only if they have contributed more than $5.000). (See section 507(d)(2).)

b List here any managers of the foundation who own 10% or more of the stock of a corporation (or an equally large portion of the ownership of a partnership or other entity) of which the foundation has a 10% or greater interest.

2   **Information Regarding Contribution, Grant, Gift, Loan, Scholarship, etc., Programs**

If you make gifts. grants. awards (see instructions), etc., to individuals or organizations, check here ☐ and complete these items:

a The name. address. and telephone number of the person to whom applications should be addressed

b The form in which applications should be submitted and information and materials they should include

c Any submission deadlines

d Any restrictions or limitations on awards. such as by geographical areas. charitable fields, kinds of institutions, or other factors

Part XVI Supplementary Information (continued)

3   Grants and Contributions Paid During the Year or Approved for Future Payment

Recipient Name and address (home or business)	If recipient is an individual, show any relationship to any foundation manager or substantial contributor	Foundation status of recipient	Purpose of grant or contribution	Amount
a Paid during the year				
Total			▶	
b Approved for future payment				
Total			▶	

Part XVII-A   Summary of Grant Programs and Other Activities

	(a) Grants and program-related investments	(b) Administrative expenses	(c) Total
1 Gifts, contributions, scholarships and other grants			
2 Direct charitable activities (describe each):			
a			
b			
c Direct technical and other assistance to grantees (see instructions)			
d All other (attach schedule)			
e Total—add lines 2a through d			
3 Program-related investments (describe each type)			
a			
b			
c			
d All other (attach schedule)			
e Total—see instructions			
4 Other qualifying distributions			
5 Other expenses not included in lines 1–4			

Part XVII-B   Supporting Data

1   Describe on an attached schedule the bases (for example, time spent, salary expenses incurred, space utilized, etc.) used to allocate administrative expenses to the activities described in Part XVII-A.

2   For the foundation's principal direct charitable activities and program-related investments, provide a schedule of relevant statistical information, such as the number of organizations and other beneficiaries served, conferences convened, research papers produced, etc.

3   Attach a schedule for Part XVII-A, lines 2 and 3, setting forth for each activity or investment area the amount of any income produced by it.

Part XVIII   Public Inspection

1   Enter the date the notice of availability of the annual return appeared in a newspaper ▶ ....

2   Enter the name of the newspaper ▶ ....

3   Check here ▶ ☐ if you have attached a copy of the newspaper notice as required by the instructions. (If the notice is not attached, the return will be considered incomplete.)

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than taxpayer or fiduciary) is based on all information of which preparer has any knowledge.

Please	Signature of officer or trustee		Date	▶	Title	

Please Paid Preparer's Use Only	Preparer's signature ▶		Date	Check if self-employed ▶ ☐	Preparer's social security no.
	Firm's name (or yours if self-employed) and address ▶			E.I. No. ▶	
				ZIP code ▶	

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